



Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

FedEx No.: 8089 0798 3058

December 22, 2015

Connie Turner
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Notice of Compliance Status, 40 CFR Subpart S – Bleach Plant Scrubber
Permit No. TV-2440-0005

Dear Connie:

Please accept this updated notice of compliance status for the Bleach Plant Scrubber based on stack testing conducted on this source on November 3, 2015. The compliance test results have been submitted to the department.

Based on the results of the tests, we are updating the following parameters associated with the bleach plant scrubber:

Parameter	Value
BP Scrubber liquid recirculation (influent) minimum flow	91
BP Scrubber minimum pH (effluent)	10.8

All other parameters remain the same.

If you have any questions, please feel free to call me at 803-981-8010 or email at mike.swanson@resolutefp.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mike Swanson'.

Mike Swanson
Environmental Engineer
Resolute Forest Products – Catawba Mill

File 202.17

cc: Dale Herendeen

1 From Please print and press hard.

Date 12/24/15 Sender's FedEx Account Number 4705-2758-7

Sender's Name DALE HERENDEN Phone (803) 981-8009

Company ABITIDIBOWATER RESOLUTE FP

Address 5300 CURETON FERRY RD

City CATAWBA State SC ZIP 29704-7700

2 Your Internal Billing Reference

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OPTIONAL

3 To

Recipient's Name CONNIE TURNER Phone ()

Company SC DHEC - BAQ

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City COLUMBIA State SC ZIP 29201

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- ☐ **FedEx 2Day A.M.**
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- ☐ **FedEx 2Day**
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
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If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

- One box must be checked.**
- ☒ **No** ☐ **Yes** As per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required.
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November 2, 2015

Ms. Mary Peyton D. Wall
Air Toxics Section
Bureau of Air Quality Control
SC DHEC
2600 Bull Street
Columbia, SC 29201

Re: Compliance Extension Request
Industrial Boiler MACT as referenced by 40 CFR 63 Subparts A and DDDDD
Resolute FP US Inc. – Catawba Mill
Title V Permit No. TV-2440-0005

Dear Ms. Wall:

The purpose of this letter is to withdraw our September 30, 2015 request for a 1-year compliance extension from 40 CFR Subpart DDDDD (Boiler MACT) as provided by 40 CFR 63.6(i).

We appreciate the Department's attention to our request. Should you have any questions or comments please do not hesitate to contact Dale Herendeen of my staff at 803-981-8009.

Sincerely,

A handwritten signature in black ink that reads 'Patrick T. Moore'.

Patrick Moore
General Manager
Resolute FP US Inc. – Catawba Mill

1 From Please print and press hard.

Date 11/2/15 Sender's FedEx Account Number 4705-2758-7

Sender's Name DALE HERENDEEN Phone (803) 981-8009

Company ADT BROWATER RESOLUTE

Address 5300 CURETON FERRY RD Dept./Floor/Suite/Room

City CATAWBA State SC ZIP 29704-7700

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

3 To

Recipient's Name MARY PEYTON WALL Phone (803) 983

Company SCDHCC - BAQ

Address 2600 BULL STREET Dept./Floor/Suite/Room

Address COLUMBIA State SC ZIP 29201

City COLUMBIA State SC ZIP 29201

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NOTE: Service order has changed. Please select carefully.

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For packages over 150 lbs., use the new
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Monday unless SATURDAY Delivery is selected.

☐ **FedEx Priority Overnight**
Next business morning.* Friday shipments will be
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is selected.

☒ **FedEx Standard Overnight**
Next business afternoon.*
Saturday Delivery NOT available.

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☐ **Indirect Signature**
If no one is available at recipient's
address, someone at a neighboring
address may sign for delivery. *For*
residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ **No** ☐ **Yes** ☐ **Yes**
As per attached Shipper's Declaration. Shipper's Declaration
not required. ☐ **Dry Ice**
Dry Ice, 9, UN 1845 x kg ☐ **Cargo Aircraft Only**

7 Payment Bill to:

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Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

October 14, 2015

Resolute Forest Products – Catawba Mill
Attn: Mr. Patrick Moore
PO Box 7
Catawba SC 29704-0007

Re: Compliance Extension Request for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD
Resolute Forest Products – Catawba Mill, TV-2440-0005
No. 1 and No. 2 Combination Boilers (Equipment ID 2605 and 3705)

Dear Mr. Moore:

The U.S. Environmental Protection Agency (EPA) promulgated the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD (Boiler MACT) on January 31, 2013. On October 1, 2015, the South Carolina Department of Health and Environmental Control (Department) received a request from Resolute Forest Products – Catawba Mill (Resolute) for a one year compliance extension for the Boiler MACT for the combination boilers. Resolute is proposing to upgrade the electrostatic precipitators (ESP) controlling emissions from each boiler by installing high frequency transformers serving each field of the ESPs.

To deem your compliance extension request for the above-referenced units complete and to continue the compliance extension process, the Department needs additional information. In accordance with 63.6(i)(12)(ii), your facility has 30 calendar days after receipt of this notice to provide the following information:

1. Provide a detailed description of high frequency transformers and how they will help to achieve compliance with the Boiler MACT.
2. Provide a detailed description of the project milestones, including an explanation for the length of time required for each project.

Once the above information is received, action on the compliance extension request can continue. If you have any questions, please contact me at 803-898-4064 or wallmp@dhec.sc.gov.

Sincerely,



Mary Peyton D. Wall
Air Toxics Section
Bureau of Air Quality

cc: 2440-0005 Compliance File

ec: Lee Page, EPA Region 4
Myra Reece, Air Quality – Central Office
Henry Porter, Air Quality – Central Office
Keith Frost, Air Quality – Central Office
Christopher Hardee, Air Quality – Central Office
Alexander Latta, Midlands EQC Region – Lancaster



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

September 24, 2015

Dale Herendeen
RESOLUTE FP US INC
PO BOX 7
CATAWBA, SC 29704

803-981-8009

Re: Report of Department Inspection/Investigation

Dear Dale Herendeen:

A representative of the South Carolina Department of Health and Environmental Control (SC DHEC), Bureau of Air Quality (BAQ), conducted an inspection of your facility on September 02, 2015. Enclosed is a copy of the inspector's report. Your facility's overall compliance status may be different from that indicated in this report, which pertains only to those observations made by the inspector at the time of the inspection. Questions regarding the report should be directed to the inspector listed in the report header.

Compliance with State and Federal air quality regulations, and with air quality permit(s) issued to your facility is your responsibility. We encourage you to read your permit(s) carefully to ensure you understand all terms, conditions, and requirements. You may also wish to review your permit periodically and monitor your status on a routine basis. Questions about permitting issues should be directed to personnel in the BAQ Engineering Services Division at (803) 898-4123. Questions about reporting issues should be directed to personnel in the BAQ Technical Management Section at (803) 898-4123.

We would also like to remind you that a pollution prevention/waste minimization program can reduce material lost to waste streams in all media. The Office of Solid Waste Reduction and Recycling through the Smart Business Recycling Program offers free, confidential, non-regulatory assistance to help you reduce wastes and waste management expenses. For more information contact the program at smartbiz@dhec.sc.gov or 800-768-7348.

Sincerely,

Dawn M. Jordan
Technical Management Section
Air Compliance Management Division

cc: Compliance File 2440-0005



**Environmental Quality Control
Bureau of Air Quality
Inspection/Investigation Report**

**Columbia EQC Office
8500 Farrow Rd Bldg #12
State Park, SC 29147-0156
803-896-0620, Fax 803-896-0617**

Source (Project):	Resolute Forest Products	Date/Time:	September 02, 2015 @ 0830
Source No:	2440-0005	Type:	Comprehensive/CEM
Mailing Address:	PO Box 7 Catawba, SC 29704	Owner/Operator:	Dale Herendeen
Source Address:	5300 Cureton Ferry Road Catawba, SC 29704	Person Contacted:	Dale Herendeen
County:	York	Source Telephone:	803-981-8009
		Code:	MA03X
		Inspector:	Buchanan, Benjamin R

Resolute Forest Products-Catawba Operations operates an integrated pulp and paper mill. On the above date Connie Turner and I conducted a comprehensive/CEM inspection at this facility to determine compliance with their operating permit. The facility provided documentation of records for 40 CFR 63 Subpart JJJJ as required. Operating Permit No. TV-2440-0005 was issued on August 20, 2008, and expired on September 30, 2013. A complete permit application was submitted and the application shield was granted, effective January 9, 2013. The Following are the inspection results:

PART 5.0 EMISSION UNIT REQUIREMENTS - A. EMISSION UNIT DESCRIPTION

TABLE 5.1 EMISSION UNITS

Unit ID	Unit Description	Control Device Description
01	Woodyard Area	N/A
02	Kraft Process- Kraft Pulp Mill	TRS Scrubber, Boiler Incineration
03	Kraft Process- Bleach Plant	Scrubber
04	Kraft Process- Chlorine Dioxide Plant	Scrubber
05	TMP Process	N/A
06	Paper Mill	Baghouses (2), Filters
07	Chemical Recovery	Boiler incineration, ESPs (3), Scrubbers (2), Baghouses (2)
08	Utilities	Cyclones, ESPs (2)
09	Waste Treatment	Boiler Incineration
10	Miscellaneous	N/A

Table 5.2 - Control Device(s)

02	2605	B & W No. 1 Combination Boiler	1959	VOC; TRS; HAP
02	3705	B & W No. 2 Combination Boiler	1968	VOC; TRS; HAP
02	5260C	LVHC System Caustic Scrubber	2000	VOC; TRS; HAP
03	5300C	Bleaching System Scrubber	2003	Cl ₂ ; Chlorinated HAP
04	1790C	Chlorine Dioxide Generator Scrubber (chilled waster and white Liquor)	1997	Cl ₂
04	1790Ca	Chlorine Dioxide Generator Tail gas Scrubber	1997	Cl ₂

Table 5.2 - Control Device(s)

		(weak wash and white liquor)		
06	B-2000	Starch Silo Bag Houses (2)	1962	PM/PM ₁₀
07	2505C	No. 2 Recovery Furnace ESP	1990	PM/PM ₁₀ /HAP Metals
07	5105C	No. 3 Recovery Furnace ESP	1983	PM/PM ₁₀ /HAP Metals
07	5211C	Smelt Tanks Venturi Caustic Scrubber (weak wash and caustic)	1966	PM/PM ₁₀ /HAP Metals/TRS
07	2723C	No. 2 Lime Kiln ESP	1995	PM/PM ₁₀ /HAP Metals
07	2724C	Reburned Lime Silo Bag House	1995	PM/PM ₁₀
07	2725C	Slaker Venturi Scrubber (weak wash and caustic)	1995	PM/PM ₁₀
07	2726C	Purchased Lime Silo Bag House	1995	PM/PM ₁₀
08	2605C	No. 1 Combination Boiler Centrifugal Cyclone	1959	PM/PM ₁₀
08	2610C1	No. 1 Combination Boiler ESP	1959	PM/PM ₁₀
08	3705C	No. 2 Combination Boiler Centrifugal Cyclone	1968	PM/PM ₁₀
08	2610C2	No. 2 Combination Boiler ESP	1980	PM/PM ₁₀
08	5260	LVHC Collection System	2001	VOC; TRS; HAP
08	5270	HVLC Collection System	2003	VOC; TRS; HAP
08	9820	Stripper Off Gases (Collection)	2001	VOC; TRS; HAP
09	9810	Condensate Steam Stripper	2001	VOC; TRS; HAP

PART 2.0 – APPLICABILITY

2.1-2.3: These permit conditions are informational in nature and the facility representative was aware of these conditions.

PART 3.0 GENERAL CONDITIONS

3.A.1-2, 3.B.1-2, 3.C.1, 3.E.1, 3.F.1, 3.G.1-3, 3.H.1, 3.I.1-3, 3.J.1, 3.K.1, 3.L.1-2, 3.M.1, 3.N.1-2,

3.O.1, 3.P.1, 3.Q.1, 3.S.1, 3.T.1, 3.U.1, and 3.V.1: These permit conditions are informational in nature and the facility representative was aware of these conditions.

3.D.1 – FEES: The facility most recently paid fees on August 19, 2015.

3.R.1-2: The facility is certifying truth, accuracy, and completeness with a responsible official on all required documents. The most recent Title V Annual Compliance Certification was received on November 13, 2014, and semiannual reports on July 21, 2015.

PART 4.0 FACILITY WIDE REQUIREMENTS

4.1-4.4, 4.7-4.14: These permit conditions are informational in nature and the facility representative was aware of these conditions.

4.5: The facility is aware if they have a malfunction lasting for one hour or more they are to notify the Regional office within 24 hours and notify BAQ Technical Management in writing within 30 days.

4.6: The Department received the facility's emissions inventory on March 24, 2015.

B. GENERIC CONDITIONS

G.1: Gauges were accessible, the facility is monitoring parameters as per permit conditions. Semiannual reports are submitted to the Department. The most recent report was received on July 21, 2015.

GC2-GC8: These permit conditions are informational in nature and the facility representative was aware of these conditions.

C. EMISSION UNIT – LIMITATIONS, MONITORING AND REPORTING**Table 5.3 - Unit ID 01 - Woodyard**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
1300	East and West Woodyard Long Wood Handling (2) West Woodyard Purchased Chip Handling East Woodyard Purchased Chip Handling (Rail) East Woodyard Purchased Chip Handling (Truck) w/cyclone East Woodyard Purchased Chip Handling (Rail) Chip Screen East Woodyard Chip Screen with Cyclone West Woodyard Chip Screen East and West Woodyard Debarking Drums (2) East Woodyard Purchased Chip (Rail) Rechipper with Cyclone East Woodyard Chipper with Cyclone West Woodyard Chipper with Cyclone East Woodyard Rechipper with Cyclone West Woodyard Rechipper TMP and Kraft Mill Chip Silos Long Term Storage Pile Outside Chip Storage (2) Hardwood Silos Hardwood Silos Cyclone	1959/1985 and 1991	None	1300
1300	Truck Dump	2006	None	1300
1300	Rail Dump	2006	None	1300

Unit ID 01 was in operation at the time of the inspection.

Conditions For Unit ID 01 – Woodyard

01.1: Limits/Standards: No issues were observed at the time of the inspection in association with fugitive particulate matter emissions. Monitoring/Record Keeping/Reporting/Other: Records of visual emissions inspections were available at the time of the inspection. The last visual emissions inspection was performed on November 11, 2014.

01.2: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: See Condition Number 01.1.

01.3: Limits/Standards: The particulate matter emission limit was derived from an equation.

Monitoring/Record Keeping/Reporting/Other: See Condition Number 01.1.

01.4: See Condition Number FW.1.

Table 5.5 - Unit ID 02 – Kraft Process: Kraft Pulp Mill

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
5210	Continuous Digester System: (Digester Chip Bin, Continuous Digester, Chip Feed System, Blow Tank, Steam Economizer and Reboiler)	2003/ 2012	5270 2605 3705	2610S1 2610S2
5220	Turpentine Recovery System: (Gas Cooler, Condenser, Decanter)	2003	5260 5260C 5270 2605 3705	2610S1 2610S2
5230	Pulp Washing System: (Pressure Diffuser, Filtrate Tank, Brown Stock Liquor Surge Tank)	2003	5270 2605 3705	2610S1 2610S2
5240	Oxygen Delignification System: (No. 1 O ₂ Reactor; Blow Tube; No. 1 Post O ₂ Washer; No. 1 Post O ₂ Filtrate Tank, No. 2 O ₂ Reactor, Blow Tube, No. 2 Post O ₂ Washer, No. 2 Post O ₂ Filtrate Tank, Post O ₂ Surge Tank)	2003 / 2012	5270 2605 3705	2610S1 2610S2
5250	Knotting and Screening System: (HD Tank, Primary Knotter, Secondary Knotter, No. 1 Primary Screen, No. 2 Primary Screen, Secondary Screen, Tertiary Screen, Quaternary Screen, Cleaner, Shive Thickner, Screen Room Filtrate Tank, Screen Room Washer)	2003	5270 2605 3705	2610S1 2610S2

Table 5.6 - Control Device(s) For Unit ID 02 – Kraft Process: Kraft Pulp Mill

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
2605	B & W No. 1 Combination Boiler	1959	VOC; TRS; HAP
3705	B & W No. 2 Combination Boiler	1968	VOC; TRS; HAP
5260C	LVHC System Caustic Scrubber	2000	VOC; TRS; HAP
5260	LVHC Collection System	2001	VOC; TRS; HAP
5270	HVLC Collection System	2003	VOC; TRS; HAP

Unit ID 02 and the associated Control Device IDs were in operation at the time of the inspection.

Conditions For Unit ID 02 – Kraft Process: Kraft Pulp Mill

02.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

02.2: Monitoring/Record Keeping/Reporting/Other: (A) Scrubber liquid flow and scrubber liquid pH indicators were operated and maintained on each module of the LVHC System Caustic Scrubber (Control Device ID 5260C). Records of scrubber liquid flow and scrubber liquid pH were available at the time of the inspection. The established operational range for scrubber liquid flow is ≥ 30 gpm. At the time of the

inspection the scrubber liquid flow was 39.0 gpm. The established operational range for scrubber liquid pH is ≥ 10 S.U. At the time of the inspection the scrubber liquid pH was 10.7 S.U. (B) See TRS conditions for Unit ID 08. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

02.3: See Part 7.0 of this inspection report.

02.4: See Condition Number FW.1.

Table 5.7 - Unit ID 03 – Kraft Process: Kraft Bleach Plant

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
5300	Four Stage D ₀ E _{0P} D ₁ D ₂ Bleaching System: (D ₀ Tower and Washer; E _{0P} Reactor, Washer and Filtrate Tank; D ₁ Tower, Washer, and Filtrate Tank, D ₂ Tower, Washer and Filtrate Tank, Acid Sewer, Alkaline Sewer)	2003 / 2012	5300C	5300S

Table 5.8 - Control Device(s) For Unit ID 03 – Kraft Process: Kraft Bleach Plant

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
5300C	Bleaching System Scrubber	2003	Cl ₂ ; Chlorinated HAP

Unit ID 03 and the associated Control Device ID were in operation at the time of the inspection.

Conditions For Unit ID 03 – Kraft Process: Kraft Bleach Plant

03.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: Liquid recirculation (influent) flow, scrubber pH (effluent) flow, and fan operation (on/off) indicators were operated and maintained for Control Device ID 5300C.

Records of liquid recirculation (influent) flow, scrubber pH (effluent) flow, and fan operation (on/off) were available at the time of the inspection. The established operational range for scrubber recirculation flow is ≥ 50 gpm. Attachment H incorrectly lists the range as ≤ 50 gpm. At the time of the inspection the scrubber recirculation flow was 100.0 gpm. The established operational range for scrubber pH (effluent) is ≥ 9.7 S.U. Attachment H incorrectly lists the range as ≤ 9.7 S.U. At the time of the inspection the scrubber pH (influent) was 10.6 S.U. The established operational range for fan status is on. At the time of the inspection the fan was on. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

03.2: See Part 7.0 of this inspection report.

03.3: See Condition Number FW.1.

Table 5.9 - Unit ID 04 – Kraft Process: Chlorine Dioxide Generator

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
1790	Chlorine Dioxide Generator: (Generator/Crystallizer/Reboiler, Saltcake Slurry Tank, Hydroclone and Saltcake Filter, Generator Dump Tank, Indirect cooling tower, ClO ₂ Adsorption Tower, Barometric Condenser, Seal Pot, ClO ₂ Storage Tanks (212,000 gallons), Filtrate Separation System	1977/1997/2012	1790C 1790Ca	1790

Table 5.10 - Control Device(s) For Unit ID 04 – Kraft Process: Chlorine Dioxide Generator

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
1790C, 1790Ca	Chlorine Dioxide Generator Scrubber (chilled water and white Liquor) with Tail-Gas Scrubber	1997	Cl ₂

Unit ID 04 and the associated Control Device IDs were in operation at the time of the inspection.

Conditions For Unit ID 04 – Kraft Process: Chlorine Dioxide Generator

04.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: Scrubber pressure drop, scrubber liquid flow, and scrubber liquid pH indicators were operated and maintained for Control Device ID 1790C. Records of scrubber pressure drop, scrubber liquid flow, and scrubber liquid pH were available at the time of the inspection. Attachment H does not list an established operational range for scrubber pressure drop. The facility representative indicated the established operational range was ≤ 18.0 inches of water. At the time of the inspection the scrubber pressure drop was 11.0 inches of water. The established operational range for scrubber liquid flow is ≥ 50 gpm. At the time of the inspection the scrubber liquid flow was 90.0 gpm. The established operational range for scrubber liquid pH is ≥ 10.0 S.U. At the time of the inspection the scrubber liquid pH was 13.3 S.U. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

04.2: Limits/Standards: A risk management plan (RMP) was available at the time of the inspection. The RMP was last revised in March 2013.

Table 5.11 - Unit ID 05 – TMP Process

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
4400	TMP Lines 1-6 (The following equipment is shared): (Chip Conveyor Chip Washing System: Chip Washer and Screens (3 Sets), Chip Storage Silos (3), Pin Chip Screen	1986	None	4400

Table 5.11 - Unit ID 05 – TMP Process

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
	Cyclone, Chip Surge Bins (2)(7,481 gallons), Heat and Turpentine Recovery System: Flash Tanks, Surge Tanks, Liquid Phase Separators (1,5204 gallons each), Condensers, Decanter (2,880 gallons)			
4400	TMP Lines 1-3: (Primary, Secondary, and Tertiary Refiner System, Peroxide Towers, Neutralization Chests, Screening and Cleaning systems, Rejects Refiner Systems, Press System, Decker System, Sodium Hydrosulfite Bleaching System)	1986	None	4400
4400	TMP Lines 4-6: (Primary, Secondary, and Tertiary Refiner System, Screening and Cleaning Systems, Rejects Refiner Systems, Press System, Decker System, Sodium Hydrosulfite Bleaching System)	1986/2003	None	4400
4400	Hydrogen Peroxide Bleaching System	2005	None	4400

Unit ID 05 was in operation at the time of the inspection.

Conditions For Unit ID 05 – TMP Process

05.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

05.2: Monitoring/Record Keeping/Reporting/Other: Records of monthly pulp production were available at the time of the inspection. The twelve-month rolling sum for the period of August 2014-July 2015 was 180,294 tons.

Table 5.13- Unit ID 06 – Paper Mill

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2000	No. 1 Paper Machine (171,850 ADT Paper/Year): (cleaner system, deculator system, precondenser system, vacuum pump system, screen system, mix tub, headbox system, forming wire, vacuum blower, vacuum trench, save-all system, presses, separators, press pulper, dryer systems, dryer pulper, calendar, dry end pulper, reel, slurry mix tanks, mix tanks)	1962	None	2000
2005	No. 1 Paper Machine Rereeler and Trim Pulper	1962	None	2000
2010	No. 1 Coater Dryer (Natural Gas fired, Propane, Kerosene): (coater system, coating dryer, screens/filters, reel, and coated broke pulper)	1962	None	2000
4600	No. 2 Paper Machine (261,600 ADT Paper/Year): (cleaner system, deculator system, precondenser, vacuum pump system, screen system, headbox system, forming wire, vacuum blower, vacuum trench, save-all system, press system, press pulper, dryer systems, dryer pulper, calendar, dry end	1986	None	4600

Table 5.13- Unit ID 06 – Paper Mill

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
	pulper, reel, slurry mix tanks, mix tanks)			
4605	No. 2 Paper Machine Rereeler and Trim Pulper	1986	None	4600
4610	No. 2 Coater Dryer (Natural gas fired, Propane) (coating system, coating dryer, screens/filters, reel, and coated broke pulper)	1986	None	4600
4100	No. 3 Lightweight Coated Paper Machine (382,917) ADT Paper/Year): (mixed stock chest, die mix tank, filters, cleaner system, deculator system, precondenser, mixing silo, vacuum pump system, vacuum trench, screen system, headbox system, mix eliminator, vacuum blowers, forming wire, press system, press pulper, dryer systems, economizer, dry end pulper, two- sided rod coater system, coating preparation system, coating mix tank, coating supply tank, steam dryer; calenders, calender pulper, reel, reel pulper, winder, trim pulper)	1968/2003	None	4100
4110	Air Flotation Dryer (Natural Gas)	1968/2003	None	4110
4120	Infrared Dryer	1968/2003	None	4120
4130	Hot Oil Heating System	1968/2003	None	4130
2100	Pulp Dryer (296,300 ADT Paper/Year): (screen system, decker, headbox system, cylinder mold, hood exhaust system, vacuum system, press system, press pulper, dryers, economizer, dry end pulper, cutter, stacker)	1959/1999	None	2100
2100	Booster Oven	1999	None	2100
9900	5.304 10 ⁶ Btu/hr Units (3)	2000	None	9900
9900	5.46 10 ⁶ Btu/hr Units (6)	2000	None	9900
9900	6.253 10 ⁶ Btu/hr Units (2)	2000	None	9900
9900	7.02 10 ⁶ Btu/hr Units (2)	2000	None	9900
9900	7.28 10 ⁶ Btu/hr Unit (1)	2000	None	9900
9900	8.45 10 ⁶ Btu/hr Units (4)	2000	None	9900
9900	10.01 10 ⁶ Btu/hr Unit (1)	2000	None	9900
9700	Starch Silos [4], Slurry Mix tanks, Starch Cookers, Flash Tank, Mix Tanks	1962	B-2000	B-2000
9701A	1,400 gallon Slurry Tank	2002	None	9701A
9701B	1,400 gallon Slurry Tank	2002	None	9701B
9702	Starch Cooker	2002	None	9702
9703	Flash Tank	2002	None	9703
9704	2,900 gallon Paste Tank	2002	None	9704

Table 5.13-Control Device(s) For Unit ID 06 – Paper Mill

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
B-2000	Starch Silo Bag Houses (2)	1962	PM/PM ₁₀

Unit ID 06 and the associated Control Device ID were in operation at the time of the inspection. The facility representative indicated Equipment IDs 2000, 2005, & 2010 had not operated in approximately 2 years.

Conditions For Unit ID 06 – Paper Mill

06.1: Limits/Standards: No visible emissions were observed at the time of the inspection. The particulate matter emission limits were derived from an equation. Monitoring/Record Keeping/Reporting/Other: (A) & (B) Records of visual emissions inspections were available at the time of the inspection. The last annual visual emissions inspection for Equipment IDs 4600, 4605, 4100, 9701A, 9701B, 9702, 9703, & 9704 were performed on November 11, 2014. The last semiannual visual emissions inspection for Equipment ID 4110 was performed on June 25, 2015. The last daily visual emission inspection for Equipment ID 9700 was performed on April 30, 2015. Equipment IDs 2000 & 2005 were not in service. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

06.2: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: (A) A log of the time, magnitude, duration and other pertinent information to determine periods of startup and shutdown were available at the time of the inspection. (B) Records of visual emissions inspections were available at the time of the inspection. The last annual visual emissions inspection for Equipment IDs 4610 & 9900 were performed on November 11, 2014. The last semiannual visual emissions inspection for Equipment ID 4120 & 4130 were performed on June 25, 2015. Equipment ID 2010 was not in service. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

06.3: Monitoring/Record Keeping/Reporting/Other: (A) The facility representative indicated Equipment ID 2010 had not operated in approximately 2 years. (B) Records of monthly fuel usage were available at the time of the inspection. The facility representative indicated Equipment ID 4120 was removed in May 2013. The twelve-month rolling sums for Equipment ID 4130 for the period of August 2014-July 2015 were 56,706 MMBtu for natural gas, 0 gallons for propane, and 0 gallons for kerosene. (C) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 4610 for the period of August 2014-July 2015 were 25,364 gallons for kerosene and 0 gallons for propane. (D) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 9900 for the period of August 2014-July 2015 were 34,274,814 scf for natural gas and 0 gallons for propane. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

06.4: Monitoring/Record Keeping/Reporting/Other: Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 4110 for the period of August

2014-July 2015 were 99,938 MMBtu for natural gas, 0 gallons for propane, and 0 gallons for kerosene. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

06.5: Monitoring/Record Keeping/Reporting/Other: See Condition Number 06.3.

06.6: Monitoring/Record Keeping/Reporting/Other: See Condition Number 06.3.

06.7: This condition is informational in nature and the facility representative was aware of this condition.

06.8: The facility representative indicated that Equipment ID 2010 had not operated in approximately 2 years.

06.9: See Condition Number FW.1.

06.10: See Part 7.0 of this inspection report.

Table 5.15- Unit ID 07 – Chemical Recovery

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2505	No. 2 Recovery Furnace (412,140 Ton BLS/year) [315,000 lb/hr Maximum steaming rate (on black liquor only)]: (Furnace, Black Liquor Tanks)	1966	2505C	2505S
2510	No. 2 Smelt Dissolving Tank (412,140 Ton BLS/year)	1966	2511C	2511S
2515	No. 2 Precipitator Mix Tank	1966	None	2515
2520	No. 2 Salt Cake Mix Tank	1966	2505C	2505S
5105	No. 3 Recovery Furnace (744,600 T BLS/year) [560,000 lb/hr Maximum steaming rate (on black liquor only)]: (Furnace, Black Liquor Tanks, Black Flash Tanks, Condensate Flash Tanks, Soap Stand Pipe, Stand Pipe Level Control Tank, Dissolving Tank)	1983;2003;2007	5105C	5105S
5115	No. 3 Precipitator Mix Tank	1966	None	5115
5120	No. 3 Salt Cake Mix Tank	1966	5105C	5105S
5110	No. 3 Smelt Dissolving Tank (744,600 T BLS/year)	1983	2511C	2511S
2723	No. 2 Lime Kiln (465 T CaO/day)	1995;2003;2010	2723S2	2723
2700	Green liquor Blend Tank, No. 1 Green Liquor Clarifier (172,730 gallons), No. 2 Green Liquor Clarifier (845,000 gallons), No. 3 Green Liquor Clarifier (845,000 gallons), Dregs Filter, Ejector, Green Liquor Storage, Green Liquor Storage Causticizers (3) (18,394 gallons each, White Liquor Pressure Filters, Mud Washer, Lime Mud Precoat Filters, Lime Mud Pre-dryer	1995	None	2700
2700	No. 4 Causticizer (62,555 gallons)	2003	2725C	2700
2701	Slaker	1995	2725C	2701
2702	Purchased Lime Silo	1995	2726C	2702
2703	Returned Lime Silo	1995	2724C	2703
2400	No. 1 Multi-Effect Evaporator Set (with new concentrator)	1959/2006/2012	5260 5260C 2605 3705	2610S1 2610S2

Table 5.15- Unit ID 07 – Chemical Recovery

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2402	Heavy Black Liquor Tank	2006	None	2400
2500	No. 2 Multi-Effect Evaporator Set (with concentrator)	1966	5260 2605 3705	2610S1 2610S2
5100	No. 3 Multi-Effect Evaporator Set (with concentrator)	1982/2012	5260 2605 3705	2610S1 2610S2
2722	Lime Kiln Oxygen Enrichment System: oxygen lance (inside kiln), oxygen storage tank, oxygen mixers (2), and piping	2010	None	2723

Table 5.16-Control Device(s) For Unit ID 07 – Chemical Recovery

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
2505C	No. 2 Recovery Furnace ESP	1990	PM/PM ₁₀ /HAP Metals
5105C	No. 3 Recovery Furnace ESP	1983	PM/PM ₁₀ /HAP Metals
2723S2	No. 2 Lime Kiln ESP	1995	PM/PM ₁₀ /PM _{2.5} /HAP Metals
2511C	No. 2 and No. 3 Smelt Tanks Venturi Caustic Scrubber (weak wash and caustic)	1966	PM/PM ₁₀ /HAP Metals/TRS
2725C	Slaker Venturi Scrubber	1995	PM/PM ₁₀
2726C	Purchased Lime Silo Baghouse	1995	PM/PM ₁₀
2724C	Reburned Lime Silo Baghouse	1995	PM/PM ₁₀
2605	B & W No. 1 Combination Boiler	1959	VOC; TRS; HAP
3705	B & W No. 2 Combination Boiler	1968	VOC; TRS; HAP
5260C	LVHC System Caustic Scrubber	2000	VOC; TRS; HAP
5260	LVHC Collection System	2001	VOC; TRS; HAP

Unit ID 07 and the associated Control Device IDs were in operation at the time of the inspection.

Conditions For Unit ID 07 – Chemical Recovery

07.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: (B) Records of visual emissions inspections were available at the time of the inspection. The last annual visual emissions inspection for Equipment IDs 2515, 2520, 5115, 5120, & 2700 were performed on November 11, 2014. The last daily visual emission inspection for Equipment ID 2702 & 2703 was performed on July 31, 2015. (C) Scrubber liquid flow indicators were operated and maintained for Control Device ID 2725C. Records of scrubber liquid flow were available at the time of the inspection. The established operational range for scrubber liquid flow is ≥ 10 gpm. At the time of the inspection the scrubber liquid flow was 85.28 gpm.

07.2: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: (A) A continuous opacity monitoring system (COMS) was operated and maintained for Equipment IDs 2505 and 2723. At the time of the inspection the instantaneous

opacity was 3.90% and the 6-minute average was 4.00% for Equipment ID 2505. At the time of the inspection the instantaneous opacity was 4.59% and the 6-minute average was 4.60% for Equipment ID 2723. Results of the most recent calibration data were as follows:

Equipment ID 2505 (September 2, 2015 at 0601):

Type	Actual Reading	Expected Reading	Calibration Acceptable
Zero	0.00	0.00 +/-0.4	yes
Span	35.34	35.00 +/-4.0	yes

Equipment ID 2723 (September 2, 2015 at 0635):

Type	Actual Reading	Expected Reading	Calibration Acceptable
Zero	-0.19	0.00 +/-0.4	yes
Span	39.63	38.00 +/-2.0	yes

(B) Scrubber liquid flow and scrubber pressure drop indicators were operated and maintained for Control Device ID 2511C. Records of scrubber liquid flow and scrubber pressure drop were available at the time of the inspection. The established operational range for scrubber liquid flow is ≥ 65 gpm. At the time of the inspection the scrubber liquid flow was 79.76 gpm. The established operational range for scrubber pressure drop is ≥ 1.5 inches of water. At the time of the inspection the scrubber liquid flow was 2.36 inches of water.

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.3: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: A continuous opacity monitoring system (COMS) was operated and maintained for Equipment ID 5105. At the time of the inspection the instantaneous opacity was 9.25% and the 6-minute average was 10.33%. Results of the most recent calibration data were as follows:

Equipment ID 5105 (September 2, 2015 at 0608):

Type	Actual Reading	Expected Reading	Calibration Acceptable
Zero	0.00	0.00 +/-0.4	yes
Span	35.66	35.10 +/-3.5	yes

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.4: Testing: Equipment ID 2505 was last source tested for particulate matter (PM) emissions on March 26-27, 2014. The test results demonstrated compliance with the emission limit. Monitoring/Record

Keeping/Reporting/Other: (A) See Part 7.0 of this inspection report. (B1) & (B2) See Condition Number 07.2.

07.5: Testing: Equipment ID 2510 was last source tested for particulate matter (PM) emissions on April 23-24, 2013. The test results demonstrated compliance with the emission limit. Monitoring/Record

Keeping/Reporting/Other: (A) See Part 7.0 of this inspection report. (B1) & (B2) See Condition Number 07.2 (B).

07.6: Testing: Equipment ID 5105 was last source tested for particulate matter (PM) emissions on March 26-27, 2014. The test results demonstrated compliance with the emission limit. Monitoring/Record

Keeping/Reporting/Other: (A) See Part 7.0 of this inspection report. (B1) & (B2) See Condition Number 07.3. (C) See Condition Number FW.3. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.7: Testing: Equipment ID 5110 was last source tested for particulate matter (PM) emissions on April 23-24, 2013. The test results demonstrated compliance with the emission limit. Monitoring/Record

Keeping/Reporting/Other: (A) See Part 7.0 of this inspection report. (B) See Condition Number 07.2(B). The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.8: Testing: Equipment ID 2723 was last source tested for particulate matter (PM) emissions on March 01, 2014. The test results demonstrated compliance with the emission limit. Monitoring/Record

Keeping/Reporting/Other: (A) See Part 7.0 of this inspection report. (B) See Condition Number 07.2. (C1) See Condition Number FW.2. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.9: Monitoring/Record Keeping/Reporting/Other: (A) See Condition Number 07.1. (B) See Condition Number 07.1. (C) This condition is informational in nature and the facility representative was aware of this condition.

07.10: Testing: Equipment IDs 5105 & 2723 were last source tested for sulfur dioxide (SO₂) emissions on March 26-27, 2014 & March 6-8, 2012. The test results demonstrated compliance with the emission limit.

Monitoring/Record Keeping/Reporting/Other: (B) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 2723 for the period of August 2014-July 2015 were 68,658 gallons for No. 6 fuel oil (maximum sulfur content 2.5%), 767,527,220 ft³ for natural gas, and 0 gallons for propane. (C) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 5105 for the period of August 2014-July 2015 were 764,258 gallons for No. 6 fuel oil (maximum sulfur content 2.5%), 140,265,237 ft³ for natural gas, and

544,418 tons for black liquor solids. (D1) See Condition Number FW.2. (D3) See Condition Number FW.3. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

07.11: Testing: Equipment IDs 5105 & 2723 were last source tested for carbon monoxide (CO) emissions on March 30-April 1, 2015 & March 6-8, 2012. The test results demonstrated compliance with the emission limit. Monitoring/Record Keeping/Reporting/Other: (B) & (C1) See Condition Number 07.10. (C3) See Condition Number FW.3.

07.12: Testing: Equipment IDs 5105 & 2723 were last source tested for nitrogen oxides (NO_x) emissions on March 30-April 1, 2015 & March 1, 2014. The test results demonstrated compliance with the emission limit. Monitoring/Record Keeping/Reporting/Other: (B) A continuous emissions monitoring system (CEMS) was operated and maintained for Equipment ID 5105. At the time of the inspection the instantaneous NO_x was 55.3 ppm. Results of the most recent calibration data were as follows:

Equipment ID 5105 (September 1, 2015):

Type	Adjusted Reading	Percent Drift	Calibration Acceptable
Zero	0.00	0.00	yes
Span	122.29	1.71	yes

(C1) See Condition Number FW.2. (C3) See Condition Number FW.3.

07.13: Monitoring/Record Keeping/Reporting/Other: (A) See Condition Number 02.2. (B) See Condition Number 08.6.

07.14: Testing: Equipment ID 2505 was last source tested for total reduced sulfur (TRS) emissions on March 26-27, 2014. The test results demonstrated compliance with the emission limit. Monitoring/Record Keeping/Reporting/Other: A continuous emissions monitoring system (CEMS) was operated and maintained for Equipment ID 2505. At the time of the inspection the instantaneous TRS was 5.50 ppm and the 1 hour average was 1.10 ppm. Results of the most recent calibration data were as follows:

Equipment ID 2505 (September 1, 2015):

Type	Adjusted Reading	Percent Drift	Calibration Acceptable
Zero	0.00	0.02	yes
Span	27.87	-3.32	yes

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

The following was noted in the last semiannual report:

	1st Qrt	2nd Qrt	Semiannual
Monitor Downtime	0.84%	4.00%	2,44\$
Excess Emissions	0.00%	0.00%	0.00%
Overall Compliance	99.16%	96.00%	97.56%

07.15: Monitoring/Record Keeping/Reporting/Other: A continuous emissions monitoring system (CEMS) was operated and maintained for Equipment ID 5105. At the time of the inspection the instantaneous TRS was 2.05 ppm and the 1 hour average was 1.80 ppm. Results of the most recent calibration data were as follows:

Equipment ID 2505 (September 1, 2015):

Type	Adjusted Reading	Percent Drift	Calibration Acceptable
Zero	0.07	0.24	yes
Span	27.05	-1.14	yes

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

The following was noted in the last semiannual report:

	1st Qrt	2nd Qrt	Semiannual
Monitor Downtime	4.10%	0.73%	2.35%
Excess Emissions	0.00%	0.00%	0.00%
Overall Compliance	95.90%	99.27%	97.65%

07.16: Testing: (A) Equipment ID 2510 was last source tested for total reduced sulfur (TRS) emissions on March 30-April 1, 2014. The test results demonstrated compliance with the emission limit.

Monitoring/Record Keeping/Reporting/Other: See Condition Number 07.2.

07.17: Monitoring/Record Keeping/Reporting/Other: (A) A continuous emissions monitoring system (CEMS) was operated and maintained for Equipment ID 2723. At the time of the inspection the instantaneous TRS was 2.00 ppm and the 1 hour average was 2.60 ppm. Results of the most recent calibration data were as follows:

Equipment ID 2723 (September 1, 2015):

Type	Adjusted Reading	Percent Drift	Calibration Acceptable
Zero	0.00	0.02	yes
Span	28.22	-0.34	yes

(B1) See Condition Number FW.2.

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

The following was noted in the last semiannual report:

	1st Qrt	2nd Qrt	Semiannual
Monitor Downtime	0.55%	0.51%	0.53%
Excess Emissions	0.00%	0.00%	0.00%
Overall Compliance	99.45%	99.49%	99.47%

07.18: Monitoring/Record Keeping/Reporting/Other: (A1) See Condition Number FW.2.

07.19: See Condition Number FW.1.

07.20-07.22: See Part 7.0 of this inspection report.

Table 5.17- Unit ID 08 – Utilities

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2550	342-375 10 ⁶ Btu/hr ^[1] Power Boiler (natural gas, No. 6 fuel oil)(225,000 lb/hr Maximum steaming rate on any fuel)	1959	2550C	2550S
2605	392-405 10 ⁶ Btu/hr ^[2] No. 1 Combination Boiler (natural gas, No. 6 fuel oil, bark, TDF) (275,000 lb/hr Maximum steaming rate (on mixed fuels): (Boiler, TRS gas cooler, TRS gas condenser, TRS mist eliminator, TRS gas reheater)	1959	2605C 2610C1	2610S2
3705	420-720 10 ⁶ Btu/hr ^[3] No. 2 Combination Boiler (natural gas, No. 6 fuel oil, bark, TDF)(500,000 lb/hr Maximum steaming rate (on oil or gas only) (Boiler, TRS gas cooler, TRS gas condenser, TRS mist eliminator, TRS gas reheater)	1968	3705C 2610C2	2610S1
5260	LVHC Collection System	2001	2605/3705	2610S1/2 Emergency Relief Valves: 24FL331 24FL336 24FL341 51FL262 26FL371
5270	HVLC Collection System	2003	2605/3705	2610S1/2 Emergency Relief Valves: 52HS937 42FL967 52FL967
5261/ 5271	Flame Arrestors, Mist Eliminators, Condensate Collection Tanks	2001/2003	None	5261/ 5271

Table 5.18-Control Device(s) For Unit ID 08 – Utilities

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
2605C	No. 1 Combination Boiler 1 Centrifugal Collector	1959	PM/PM ₁₀

Table 5.18-Control Device(s) For Unit ID 08 – Utilities

Control Device ID	Description	Installation Date/Modification Date	Pollutant Controlled
2610C1	No. 1 Combination Boiler ESP	1980	PM/PM ₁₀
3705C	No. 2 Combination Boiler Centrifugal Collector	1968	PM/PM ₁₀
2610C2	No. 2 Combination Boiler ESP	1980	PM/PM ₁₀

Unit ID 08 and the associated Control Device IDs were in operation at the time of the inspection.

Conditions For Unit ID 08 – Utilities

08.1: Limits/Standards: No visible emissions were observed at the time of the inspection. A log of the time, magnitude, duration and other pertinent information to determine periods of startup and shutdown were available at the time of the inspection. **Monitoring/Record Keeping/Reporting/Other:** (A) Records of visual emissions inspections were available at the time of the inspection. The last annual visual emissions inspection for Equipment ID 2550 was performed on November 11, 2014. (B) A continuous opacity monitoring system (COMS) was operated and maintained for Equipment IDs 2605 and 3705. At the time of the inspection the instantaneous opacity was 2.00% and the 6-minute average was 2.00% for Equipment ID 2605. At the time of the inspection the instantaneous opacity was 6.00% and the 6-minute average was 6.00% for Equipment ID 3705. Results of the most recent calibration data were as follows:

Equipment ID 2605 (September 2, 2015 at 0637):

Type	Actual Reading	Expected Reading	Calibration Acceptable
Zero	0.00	0.00 +/-0.4	yes
Span	34.03	36.00 +/-4.0	yes

Equipment ID 3705 (September 2, 2015 at 0612):

Type	Actual Reading	Expected Reading	Calibration Acceptable
Zero	0.00	0.00 +/-0.4	yes
Span	36.47	36.00 +/-4.0	yes

The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

The following was noted in the last semiannual report:

	No. 1 Comb Boiler (2605)	No. 2 Comb. Boiler (3705)
Monitor Downtime	0.18%	1.56%
Excess Emissions	0.00%	0.06%
Overall Compliance	99.81%	98.38%
Precipitator Bypass	0 Minutes	1270 Minutes

08.2: Testing: (A1) Equipment ID 2550 was last source tested for particulate matter (PM) emissions on April 23-24, 2014. The test results demonstrated compliance with the emission limit. (A2) Equipment IDs 2605 & 3705 were last source tested for particulate matter (PM) emissions on March 30-April 1, 2015 and

April 21, 2015. The test results demonstrated compliance with the emission limit. Monitoring/Record Keeping/Reporting/Other: (A) See Condition Number 08.1. (B1) & (B2) See Condition Number 08.1. (C) This information is informational in nature and the facility representative was aware of this condition.

08.3: Monitoring/Record Keeping/Reporting/Other: (A) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 2550 for the period of August 2014-July 2015 were 1,035,448 gallons for No. 6 fuel oil (maximum sulfur content 2.5%) and 155,146,996 ft³ for natural gas. Records of fuel oil supplier certification were available at the time of the inspection. (B) Records of monthly fuel usage were available at the time of the inspection. The twelve-month rolling sums for Equipment ID 2605 for the period of August 2014-July 2015 were 87,109 gallons for No. 6 fuel oil (maximum sulfur content 2.5%), 205,755,020 ft³ for natural gas, 3,116 tons for Tire Derived Fuel (TDF), and 127,997 tons for bark. The twelve-month rolling sums for Equipment ID 3705 for the period of August 2014-July 2015 were 195,995 gallons for No. 6 fuel oil (maximum sulfur content 2.5%), 316,462,629 ft³ for natural gas, 4,028 tons for Tire Derived Fuel (TDF), and 167,325 tons for bark. Records of fuel oil supplier certification were available at the time of the inspection. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

The following was noted in the last semiannual report:

	No. 1 Comb Boiler (2605)	No. 2 Comb. Boiler (3705)
Monitor Downtime	1.43%	2.01%
Excess Emissions	0.08%	0.10%
Overall Compliance	98.48%	97.88%
Precipitator Bypass	3440 Minutes	4482 Minutes

08.4: Reserved

08.5: Monitoring/Record Keeping/Reporting/Other: The facility representative indicated specification oil was not burned as fuel.

08.6: Monitoring/Record Keeping/Reporting/Other: See Condition Number 08.3.

08.7: Monitoring/Record Keeping/Reporting/Other: Records of venting, bypasses, and/or losses that are exhausted to the atmosphere without being combusted in the boilers were available at the time of the inspection. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

08.8: See Part 7.0 of this inspection report.

Table 5.19- Unit ID 09 – Waste Treatment

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2901	Mix Box	1959/1999	N/A	2901
2901	Bar Screen	1959/1999	N/A	2901
2901	Primary Clarifier	1959/1999	N/A	2901
2901	Settling Pond	1959/1999	N/A	2901
2901	Aerated Biotreatment	1959/1999	N/A	2901
2901	Holding Basins	1959/1999	N/A	2901
2901	Tertiary Treatment Plant	1959/1999	N/A	2901
2902	No. 1 Holding Basin Pump No. 1 (325 hp Diesel Pump)	1988	N/A	2902
2903	No. 1 Holding Basin Pump No. 2 (345 hp Diesel Pump)	1999	N/A	2903
2904	Aerated Stabilization Basin Pump (200 hp Diesel Pump)	2001	N/A	2904
2905	Tertiary Treatment Plant Pump (200 hp Diesel Pump)	2001	N/A	2905
9800	180,000 gallon Condensate Collection Tank	1999	2605/3705	2610S1 2610S2
9801	800 gallon/minute Condensate Steam Stripper	2000	2605/3705	2610S1 2610S2
9820	Stripper Off Gases (SOG) Collection System	2001	2605/3705	2610S1/2

Table 5.20-Control Device(s) For Unit ID 09 – Waste Treatment

Control Device ID	Description	Installation Date/ Modification Date	Pollutant Controlled
2605	B & W No. 1 Combination Boiler	1959	TRS/HAP/VOC
3705	B & W No. 2 Combination Boiler	1968	TRS/HAP/VOC
9801	800 gallon/minute Condensate Steam Stripper	2000	Condensate HAP
9820	Stripper Off Gases (SOG) Collection System	2001	TRS/HAP/VOC

Unit ID 09 and the associated Control Devices were in operation at the time of the inspection. The facility representative indicated Equipment IDs 2902, 2903, 2904, & 2905 had been removed.

Conditions For Unit ID 09 – Waste Treatment

09.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

Monitoring/Record Keeping/Reporting/Other: (B) The facility representative indicated Equipment IDs 2902, 2903, 2904, & 2905 had been removed.

09.2: Monitoring/Record Keeping/Reporting/Other: The facility representative indicated Equipment IDs 2902, 2903, 2904, & 2905 had been removed.

09.3: Monitoring/Record Keeping/Reporting/Other: The facility representative indicated Equipment ID 2903 had been removed.

09.4: See Conditions for Unit ID 08.

09.5: See Part 7.0 of this inspection report.

Table 5.21- Unit ID 10 – Storage Tanks

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
M10-223	Methanol Tank	post 1984	N/A	1100

Unit ID 10 was in operation at the time of the inspection.

Conditions For Unit ID 10 – Storage Tanks

10.1: Limits/Standards: No visible emissions were observed at the time of the inspection.

10.2: Monitoring/Record Keeping/Reporting/Other: This condition is informational in nature and the facility representative was aware of this condition.

Table 5.23- Unit ID 11 – Miscellaneous

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
2900	Landfill	1959	N/A	2900
1000	Road Activities	1959	N/A	1000
1000	Equipment Leaks & Cleaning Material usage	1959	N/A	1000
1000	Miscellaneous Material Usage	1959	N/A	1000

Unit ID 11 was in operation at the time of the inspection.

Conditions For Unit ID 11 – Miscellaneous

11.1: Monitoring/Record Keeping/Reporting/Other: Records of visual emissions inspections were available at the time of the inspection. The last annual visual emissions inspection for Equipment IDs 2900 & 1000 was performed on November 11, 2014.

D. Facility Wide – LIMITATIONS, MONITORING AND REPORTING

FW.1: The facility representative indicated that the project associated with Construction Permit No. 2440-0005-DA never started.

FW.2: Monitoring/Record Keeping/Reporting/Other: Records of monthly production rates for Unit ID 07-Equipment ID 2723 were available at the time of the inspection. The twelve-month rolling sum for the period of August 2014-July 2015 was 336 tons per day.

FW.3: Monitoring/Record Keeping/Reporting/Other: The twelve-month rolling sums for the period of August 2014-July 2015 were as follows for Unit ID 07-Equipment ID 5105: PM = 108 tons, PM₁₀ = 77 tons, SO₂ = 15 tons, CO = 425 tons, NO_x = 353 tons, VOC = 27.69 tons, TRS = 7.97 tons, and Be = 0.00012 tons.

FW.4: Monitoring/Record Keeping/Reporting/Other: Records of visual emissions inspections were available at the time of the inspection. See the Unit ID conditions for specific visual emission inspection

information. The facility is submitting semiannual reports. The most recent report was received on July 21, 2015.

FW.5: Monitoring/Record Keeping/Reporting/Other: (A1) See Condition Number 02.2. (A2) Records of the combination boiler that is combusting TRS/HAP (NCG) streams, the daily bark fired in each combination boiler, and the daily kraft pulp production (ADTUBP) were available at the time of the inspection. Records for each operating day for the daily bark/kraft pulp production ratio by dividing the daily bark fired in the combination boiler incinerating NCG streams by the daily kraft pulp production were available at the time of the inspection. Records of the 30-day rolling average bark/kraft pulp production ratio for each operating day were available at the time of the inspection. (B) See Condition Number 08.3. (C) Records necessary to determine total SO₂ emissions from TRS combustion were available at the time of the inspection. The twelve-month rolling sums for the period of August 2014-July 2015 were 1836.96 tons for Equipment ID 2605 and 577.92 tons for Equipment ID 3705.

FW.6: Monitoring/Record Keeping/Reporting/Other: Records of daily unbleached pulp production and average daily unbleached pulp production were available at the time of the inspection. The twelve-month rolling sum for the period of August 2014-July 2015 was 489,417 tons. The twelve-month rolling average of air dried tons of unbleached pulp per day for the period of August 2014-July 2015 was 1340.87 tons per day (489,417 tons/365 days = 1340.87 tons per day).

FW.7: The facility representative indicated that the project associated with Construction Permit No. 2440-0005-DC had not been completed.

PART 6.0 ADDITIONAL CONDITIONS A. OPERATIONAL FLEXIBILITY

The facility representative was aware of the requirement to maintain an on-site implementation log (OSIL).

PART 7.0 NESHAP PART 63 REQUIREMENTS (MACT)

B. NESHAP PART 63 SUBPARTS A [General Provisions]; S [NESHAP From The Pulp And Paper Industry](MACT S); MM [NESHAP For Chemical Recovery Combustion Sources At Kraft, Soda, Sulfit, And Stand-Alone Semichemical Pulp Mills](MACT MM); and JJJJ [NESHAP: Paper And Other Web Coating](MACT JJJJ)

MACT.1: (A) The facility is sending Hazardous Air Pollutant (HAP) gas emissions from the Low Volume High Concentration (LVHC) and High Volume Low Concentration (HVLC) affected sources to the combination boiler.

The facility is monitoring flow continuously which meets the requirement of monitoring once every 15 minutes in each bypass line for computer controlled valves.

For manual valves on bypass lines, the facility is maintaining the valves in a closed position with a seal. The facility is inspecting each manual bypass valve once each calendar month at least 21 days apart to ensure gases are not routed through the bypass line. Monthly records were reviewed for the months of March 2015 through August 2015.

(C) The facility submitted semiannual reports for this condition.

MACT.2: (A) The facility is routing condensate streams to the condensate stripper for treatment using a closed collection system.

The facility monitors the condensate feed rate, steam feed rate, and condensate feed temperatures at least once every 15 minutes for the steam stripper. The most current reading during the inspection was an average condensate feed rate of 292 gpm, steam feed rate of 46,780 lbs, and a condensate feed temperature of 206 °F. The facility is using this information along with the effective steam ratio to calculate the daily condensate collection and treatment values. The facility stated that the methanol concentration of the condensate is tested on an annual basis. The most recent annual test was conducted on 9/15/2015 through 9/17/2014 and showed a concentration of 3983 mg/L methanol. The facility is maintaining 15-day rolling averages for condensate collection and condensate treatment. The 15-day averages are calculated once per week. The 15-day average condensate collection value for August 25, 2015 was 16.0 lb/ODTP. The 15-day average condensate treatment value for August 25, 2015 was 14.7 lb/ODTP. A review of the past 50 weeks of 15-day averages indicated the facility is maintaining the required averages.

The facility submitted semiannual reports for this condition.

(B) The facility is keeping the proper records electronically for this condition.

MACT.3: The facility is using chlorine dioxide in the bleaching process. The facility is using scrubber 5300C for controlling chlorinated HAP from the bleach plant. The facility is routing bleach plant emissions to the scrubber using a closed vent system. The facility is monitoring flow once every 15 minutes in each bypass line for computer controlled valves.

For manual valves on bypass lines, the facility is maintaining the valves in a closed position with a seal. The facility is inspecting each manual bypass valve once each calendar month at least 21 days apart to ensure gases are not routed through the bypass line.

(A) The facility is recording the scrubber liquid flow, pH, and fan operation at least every 15 mins for Scrubber 5300C. The observed three hour average scrubber liquid flow was 100gpm, the observed three hour average pH was 10.6, and the fan operation was on. The facility submitted semiannual reports for this condition.

MACT.4: (A) The facility is maintaining a site-specific inspection plan for the LVHC and HVLC affected sources listed in this condition. The last annual inspection was performed in June 2015.

Records of LVHC and HVLC leak inspections are maintained. Records of LVHC and HVLC inspections indicate the equipment was inspected once every thirty (30) days at least 21 days apart. For any readings above 500 ppm repair attempts are initiated within 5 calendar days after identifying the problem and corrective action completed within 15 calendar days after the problem is identified. If a repair took longer than 15 days, the facility documented why the repair was delayed.

(B) The facility is maintaining a site-specific inspection plan for the condensate affected sources listed in this condition. The last annual inspection was performed in June 2015. Records of condensate inspections indicate the equipment was inspected once every thirty (30) days at least 21 days apart. For any readings above 500 ppm repair attempts are initiated within 5 calendar days after identifying the problem and corrective action completed within 15 calendar days after the problem is identified. If a repair took longer than 15 days, the facility did document why the repair was delayed and whether or not the unit was taken out of service.

MACT.5: (A1) The facility is using a Continuous Opacity Monitoring System (COMS) for recording opacity at least once every 10 seconds for No. 2 Recovery Furnace ESP 2505C, No.3 Recovery Furnace ESP 5105C, and No. 2 Kiln ESP 2723. The facility is using the 10 second readings to calculate 6 minute averages and has records of the 6 minute averages. The following readings were observed.

Unit	Observed 6 minute average opacity
#2 Recovery Furnace	6% @ 7am on 9/2/2015
#3 Recovery Furnace	11% @ 7am on 9/2/2015
#2 Lime Kiln	5% @ 7am on 9/2/2015

(A2) The facility submitted semiannual reports for this condition.

(B1) The facility is recording and maintaining records of the scrubber liquid flow and pressure drop at least once every fifteen (15) minutes for Scrubber 2511C which is the control device for Smelt Dissolving Tank #2 (equipment ID 2510) and #3 (equipment ID 5110). The facility is reviewing the 15-minute readings for compliance with the parametric ranges. Three hour averages are calculated when the three hour average could be outside the compliance range (based on a review of the 15-minute data). The current 15-minute readings observed were: 80 gpm flow and 2.36 inches of water pressure drop. These values were well

above the required limits of ≥ 65 gpm and ≥ 1.5 " water. The facility provided 3-hour averages for the month of July at the time of request. All data reviewed was within the parameter ranges.

(B2) The facility maintained excursion reports with corrective actions.

(C) The facility submitted semiannual reports for this condition.

(D) The facility is maintaining records on-site as required.

MACT.6: The facility is not calculating or documenting the total monthly HAP for the coatings applied for the No.1 Coater Dryer and No. 2 Coater Dryer as required. Records for the material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations of monthly average HAP for all coatings materials used was not available as required. Facility personnel stated they performed the equation 4 calculation in the past but have not calculated it recently and do not calculate it monthly. The facility submitted information to the Air Toxics section on September 18, 2015. This information is being reviewed by the Air Toxics section. The facility is recording the hours of operation for the No.1 Coater Dryer and No. 2 Coater Dryer. The No.1 Coater Dryer ran for 0 hours and the No.2 Coater Dryer ran for 3448 hours. The facility submitted semiannual reports for this condition.

MACT.7: The facility has a continuous monitoring system quality assurance plan and presented documentation showing they are following it. The plan was dated October 2004.

MACT.8: (A) The facility has created and maintained a Startup, Shutdown, and Malfunction (SSM) Plan for Subpart MM affected sources. An SSM Plan is not required for Subpart S affected sources. The facility is performing corrective actions when needed. The SSM plan was last updated in June 2007. The plan includes the elements identified in this condition: Procedures for operating and maintaining the source during periods of SSM and Corrective Action.

(B) This condition applies only to Subpart MM affected sources. Subpart S indicates that 63.10(d)(5) does not apply to that regulation. The facility did not have any events that triggered immediate SSM reports.

(C) The facility submitted quarterly reports for Subpart MM and semiannual reports for Subpart S. The reports include startup, shutdown, and malfunction information.

MACT.9: Informational. The facility is aware of the requirements of the respective NESHAP Subparts and the permit Attachments.

MACT.10: Informational. The facility is aware of the requirements of the respective NESHAP Subparts and the permit Attachments.

NESHAP 40 CFR PART 63 SUBPART ZZZZ-STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

The facility operates a fire pump and an emergency generator subject to 40 CFR Part 63 Subpart ZZZZ.

The equipment was equipped with non-resettable hour meters. Records of hours of operation and maintenance were available at the time of the inspection. It is recommended that the hour meter associated with the No. 2 Lime Kiln emergency generator be replaced. Several of the hour meter dials were difficult to read because the numbers had worn.

ATTACHMENT B-Insignificant Activities**Table B-1 Insignificant Activities**

Equip ID	Source Description	Location	Basis
M38-0001	Turbine Electric Generator (44MW)	Plant	Emission Level < 5 tpy
M26-5000	Turbine Electric Generator (20MW)	Plant	Emission Level < 5 tpy
	Turbine Electric Generator on Steam Header	Plant	Emission Level < 5 tpy
M10-77	Elevated Water Tank	Yard/Plant	Insignificant Activity List (A.20)
M10-111	No. 1 Propane Tank	Yard/Plant	Insignificant Activity List (A.19)
M10-112	No. 2 Propane Tank	Yard/Plant	Insignificant Activity List (A.19)
M10-116	No. 2 Fuel Oil Storage Tank	Yard/Plant	VOC < 5 tpy
M10-162	4,000 gallon Hydraulic Oil Tank-South	Yard/Plant	VOC < 5 tpy
M10-164	4,000 gallon Hydraulic Oil Tank-North	Yard/Plant	VOC < 5 tpy
M10-170	No. 1 Fuel Oil Storage Tank	Yard/Plant	VOC < 5 tpy
M10-173	Bulk Oil Lubricating Van Oil Tank	Yard/Plant	VOC < 5 tpy
M10-283	Fuel Oil Spill Tank at LWC shipping	Yard/Plant	VOC < 5 tpy
M10-306	No. 4 Lube Oil Storage Tank	Yard/Plant	VOC < 5 tpy
M10-307	No. 5 Lube Oil Storage Tank	Yard/Plant	VOC < 5 tpy
M10-308	No. 6 Lube Oil Storage Tank	Yard/Plant	VOC < 5 tpy
M10-314	3,000 Gallon Diesel Fuel Tank	Yard/Plant	VOC < 5 tpy
M10-315	1,000 Gallon Kerosene Fuel tank	Yard/Plant	VOC < 5 tpy
M10-338	Waste Oil Storage Tank at Fuel oil tanks	Yard/Plant	VOC < 5 tpy
M10-339	Oil/Water Separator Feed Tank, Fuel Oil tank	Yard/Plant	VOC < 5 tpy
M10-347	Above Ground Lube oil storage tank	Yard/Plant	VOC < 5 tpy
M10-348	Above Ground Lube oil storage tank	Yard/Plant	VOC < 5 tpy
M10-361	Oil/Water Separator Feed Tank at Truck Unloading	Yard/Plant	VOC < 5 tpy
M12-41	Drinking Water Tank	Filter Plant	Insignificant Activity List (A.20)
M12-45	Vacuum Priming Tank	Filter Plant	VOC < 5 tpy
M12-60	Finished Water Tank	Filter Plant	Insignificant Activity List (A.20)
M12-96	Poly Phosphate Mix Tank	Filter Plant	Emission Level < 5 tpy
M12-97	Poly Phosphate Day Tank	Filter Plant	Emission Level < 5 tpy
M12-113	Sodium Sulfite Day Tank	Filter Plant	Emission Level < 5 tpy
M12-117	Lime Solution Tank	Filter Plant	Emission Level < 5 tpy
M12-117	Brine Tank	Filter Plant	Emission Level < 5 tpy
M12-119	Sulfuric Acid Tank-15 Diameter (outside not vented)	Filter Plant	Emission Level < 5 tpy
M12-121	Caustic tank – 16' Diameter	Filter Plant	Emission Level < 5 tpy
M12-122	Demineralized Water Storage Tank	Filter Plant	Insignificant Activity List (A.20)
M12-134	Sulfuric Acid Day Tank	Filter Plant	Emission Level < 5 tpy
M12-135	Caustic Day Tank	Filter Plant	Emission Level < 5 tpy

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M12-135	Caustic Day Tank	Filter Plant	Emission Level < 5 tpy
M12-216	Concentrated alum Tank	Filter Plant	Emission Level < 5 tpy
M12-218	Dilute Alum Tank	Filter Plant	Emission Level < 5 tpy
M12-679	West Woodyard Cooling Tower Water Tank	Filter Plant	Insignificant Activity List (A.20)
M12-707	East Woodyard Cooling Tower Water tank	Filter Plant	Insignificant Activity List (A.20)
M14-174	Bulk Defoamer Head Tank	Pulp Mill	Insignificant Activity List (A.20)
M15-5	Warm Water Tank	BS Washers	Insignificant Activity List (A.20)
M15-97	Bulk Defoamer Storage Tank	BS Washers	VOC < 5 tpy
M17-479	Instrument Air Receiver Tank	Bleach Plant	Insignificant Activity List (A.25)
M19-9	93% Sulfuric Acid Day Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M19-59	Dilute Alum Head Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M19-60	Alum Constant Head Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M19-100	Concentrated Retention Aid Tank	No. 1 Paper Machine	VOC < 5 tpy
M19-108	Color Tank North Row East	No. 1 Paper Machine	Emission Level < 5 tpy
M19-109	Color Tank North Row Center	No. 1 Paper Machine	Emission Level < 5 tpy
M19-110	Color Tank North Row West	No. 1 Paper Machine	Emission Level < 5 tpy
M19-111	Color Tank South Row East	No. 1 Paper Machine	Emission Level < 5 tpy
M19-112	Color Tank South Row West	No. 1 Paper Machine	Emission Level < 5 tpy
M19-135	Clay Additive Supply Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M19-136	Clay Additive Mix Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M19-141	Deculator Condensate Water collecting Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-11	Primary Flash Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-28	No. 1 Fresh Water Collecting Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-66	Felt Wash Tank	No. 1 Paper Machine	VOC < 5 tpy
M20-157	Concentrated Felt Wash Mix Tank	No. 1 Paper Machine	VOC < 5 tpy
M20-161	No. 1 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-162	No. 2 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-163	No. 3 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-164	No. 4 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-165	No. 5 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-166	No. 6 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-167	No. 7 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-168	No. 8 Steam Separator Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-172	Secondary Flash Tank	No. 1 Paper Machine	Insignificant Activity List (A.25)
M20-183	Oil Tank A East	No. 1 Paper Machine	VOC < 5 tpy
M20-184	Oil Tank A West	No. 1 Paper Machine	VOC < 5 tpy
M20-187	Oil Sump Tank at Column 35	No. 1 Paper Machine	VOC < 5 tpy
M20-188	Oil Sump Tank at Column 41	No. 1 Paper Machine	VOC < 5 tpy
M20-189	Oil Sump Tank at Column 55	No. 1 Paper Machine	VOC < 5 tpy
M20-191	Acid Head Tank	No. 1 Paper Machine	Emission Level < 5 tpy
M20-203	Retention Aid Mixing Tank	No. 1 Paper Machine	VOC < 5 tpy
M20-215	Dilute Retention Aid Tank	No. 1 Paper Machine	VOC < 5 tpy
M20-237	No. 2 Condensate Receiver Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-265	Primary Collector Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-266	Secondary Collector Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-334	No. 2 Fresh Water Collecting Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-345	PM Shower Condensate Tank	No. 1 Paper Machine	Insignificant Activity List (A.20)
M20-442	Caustic Felt Wash Storage Tank	No. 1 Paper Machine	VOC < 5 tpy
M22-39	Propane Vapor Surge Tank	Pulp Finishing	Insignificant Activity List (A.19)
M22-155	Pulp Cutter Blade Heater Water Tank	Pulp Finishing	Insignificant Activity List (A.20)

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M23-114	270 Gallon Fuel Tank	Shops/Stores	VOC < 5 tpy
M25-172	No. 2 Cooling Water Collection Tank	Recovery Boilers	Insignificant Activity List (A.20)
M26-33	No. 1 Cooling Water Collecting Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-51	Condensate Collecting Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-52	Demineralized Water Storage Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-69	Boiler Continuous B.D.Flash Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-79	Phosphated Feed Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-80	Caustic Feed Tank (Neutralizing Amine)	No. 1 Comb. Boiler	Emission Level < 5 tpy
M26-81	Neutralizing Amine Feed Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-82	Hydrazine Feed Tank	No. 1 Comb. Boiler	Insignificant Activity List (A.20)
M26-5016	Turbine Oil Reservoir	No. 1 Comb. Boiler	VOC < 5 tpy
M26-5063	No. 2 Control Air Compressor Receiver	No. 1 Comb. Boiler	Insignificant Activity List (A.25)
M27-177	25% Caustic Tank	Causticizing	Emission Level < 5 tpy
M27-463	No. 1 Settling Aid Retention Tank	Causticizing	VOC < 5 tpy
M27-464	No. 2 Settling Aid Retention Tank	Causticizing	VOC < 5 tpy
M28-79	Sulfuric Acid Storage Tank	ClO ₂ Process	Emission Level < 5 tpy
M28-93	4% Caustic Storage Tank	ClO ₂ Process	Emission Level < 5 tpy
M28-136	Liquid Nitrogen Storage Tank	ClO ₂ Process	Insignificant Activity List (A.19)
M28-139	Emergency Water Tank	ClO ₂ Process	Insignificant Activity List (A.20)
M28-141	Sulfuric Acid Day Tank	ClO ₂ Process	Emission Level < 5 tpy
M28-146	Sodium Chlorate Day Tank	ClO ₂ Process	Emission Level < 5 tpy
M28-157	Sodium Chlorate Unloading Tank	ClO ₂ Process	Emission Level < 5 tpy
M28-215	Sodium Chlorate Storage Tank C	ClO ₂ Process	Emission Level < 5 tpy
M29-22	Air Compressor Receiver Tank	Waste Treatment	Insignificant Activity List (A.25)
M29-27	No. 2 Alum Storage Tank	Waste Treatment	Emission Level < 5 tpy
M29-28	No. 3 Alum Storage Tank	Waste Treatment	Emission Level < 5 tpy
M29-31	Anionic Polymer Mix Tank	Waste Treatment	Emission Level < 5 tpy
M29-34	Anionic Polymer Day Tank	Waste Treatment	Emission Level < 5 tpy
M29-36	No. 1 Alum Storage Tank	Waste Treatment	Emission Level < 5 tpy
M29-36	Acid Storage Tank	Waste Treatment	Emission Level < 5 tpy
M29-37	Alum Mix Tank	Waste Treatment	Emission Level < 5 tpy
M29-39	DAF Air Solution Tank	Waste Treatment	VOC < 5 tpy
M29-40	Coagulation Contact Tank	Waste Treatment	Emission Level < 5 tpy
M29-42	Flocculation Contact Tank	Waste Treatment	Emission Level < 5 tpy
M29-44	DAF Sludge Tank	Waste Treatment	VOC < 5 tpy
M29-46	DAF Clarifier Tank and Skimmer	Waste Treatment	VOC < 5 tpy
M29-59	Aeration Pond Defoamer Bulk Tank	Waste Treatment	VOC < 5 tpy
M30-338	PM Drive Reducers Lube Oil Tank	General	VOC < 5 tpy
M32-2	Type 1 Clay Storage Tank No. 2	No. 1 Coating Prep	Emission Level < 5 tpy
M32-3	Outside Alum Storage Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-31	No. 3 Cowles Mix Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-32	No. 2 Cooked Starch Tanks	No. 1 Coating Prep	Emission Level < 5 tpy
M32-34	No. 1 Cooked Starch Holding Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-42	No. 2 Cowles Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-43	No. 1 Cowles Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-55	No. 1 PM Coater Supply Tank No. 2	No. 1 Coating Prep	Emission Level < 5 tpy
M32-56	No. 1 PM Coater Supply Tank No. 1	No. 1 Coating Prep	Emission Level < 5 tpy
M32-64	No. 1 PM Coater Service Tank No. 1	No. 1 Coating Prep	Emission Level < 5 tpy
M32-66	No. 1 PM Coater Service Tank No. 2	No. 1 Coating Prep	Emission Level < 5 tpy
M32-72	No. 1 Mix Tank	No. 1 Coating Prep	Emission Level < 5 tpy

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M32-80	Outside Alum Storage Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-113	Titanium Dioxide Storage Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-118	No. 1 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-119	No. 2 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-149	No. 2 Mix Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-157	No. 1 Flash Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-175	No. 1 Insolublizer Storage Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-188	No. 1 Calcium Stearate Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-189	No. 2 Calcium Stearate Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-194	Ammonia Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-200	No. 3 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-218	Outside Alum Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-254	No. 5 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-256	No. 6 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-257	No. 4 Latex Storage Tank	No. 1 Coating Prep	VOC < 5 tpy
M32-267	No. 7 Calcined Clay Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-268	No. 6 Calcined Clay Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-328	No. 4 Delaminated Clay Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-330	No. 4 Delaminated Clay Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-341	No. 1 Starch Slurry Mix Tanks	No. 1 Coating Prep	Emission Level < 5 tpy
M32-342	No. 2 Starch Slurry Mix Tanks	No. 1 Coating Prep	Emission Level < 5 tpy
M32-345	No. 1 Starch Slurry Holding Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M32-346	No. 2 Starch Slurry Holding Tank	No. 1 Coating Prep	Emission Level < 5 tpy
M33-83	Condensate Flash Tank	No. 1 Coater	Insignificant Activity List (A.20)
M33-136	Propane Gas Tank	No. 1 Coater	Insignificant Activity List (A.19)
M33-199	Cooling Water Collecting Tank	No. 1 Coater	Insignificant Activity List (A.20)
M33-296	Supply Fan Lube Oil System Oil Tank	No. 1 Coater	VOC < 5 tpy
M33-299	No. 2 Alum Constant Head Tank	No. 1 Coater	Emission Level < 5 tpy
M36-16	Compression Tank-Old System	Administration	Emission Level < 5 tpy
M36-17	Refrigerant Receiver Old System	Administration	Emission Level < 5 tpy
M36-22	Well Drinking Water Storage Tank	Administration	Insignificant Activity List (A.20)
M36-56	Hot Water System Expansion Tank	Administration	Insignificant Activity List (A.20)
M36-59	Fuel Oil Day Tank	Administration	VOC < 5 tpy
M36-68	Propane Storage Tank	Administration	Insignificant Activity List (A.19)
M36-68	Propane Storage Tank	Administration	Insignificant Activity List (A.19)
M36-75	Potable Hot Water Storage Tank	Administration	Insignificant Activity List (A.20)
M36-84	Hot Water System Air Separator	Administration	Insignificant Activity List (A.20)
M36-85	Chilled Water System Expansion Tank	Administration	Insignificant Activity List (A.20)
M36-85	Chilled Water System Air Separator (2)	Administration	Insignificant Activity List (A.20)
M37-21	No. 2 Deaerating Feedwater Storage Tanks	No. 2 Comb. Boiler	Insignificant Activity List (A.20)
M37-30	Small Caustic Storage Tank	No. 2 Comb. Boiler	Emission Level < 5 tpy
M37-149	Emergency Start-up Air Compressor Receiver Tank	No. 2 Comb. Boiler	Insignificant Activity List (A.25)
M37-182	Air Receiver Tank for No. 6 and 7 Air Compressor	No. 2 Comb. Boiler	Insignificant Activity List (A.25)
M38-3	Main Lube Oil Tank	No. 2 Turbine	VOC < 5 tpy
M39-106	Chilled Water System Air Separator		Insignificant Activity List (A.20)
M40-56	Red Dye Mix Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-80	Concentrated Acid Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-82	5 % diluted sulfuric Acid tank	No. 3 Stock Prep	Emission Level < 5 tpy

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M40-85	Alum Use Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-89	Blue Dye Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-91	Red Dye Storage Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-93	Blue Dye Storage Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-106	Caustic and Kerosene Measuring Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-108	Concentrated Solution Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-110	Dilute Solution Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-116	Alum dilution Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-122	Acid Measuring Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M40-161	Caustic Felt Wash Storage Tank	No. 3 Stock Prep	VOC < 5 tpy
M40-173	Bulk Defoamer Storage Tank	No. 3 Stock Prep	VOC < 5 tpy
M40-176	Soap Storage tank	No. 3 Stock Prep	VOC < 5 tpy
M40-177	Soap Head Tank	No. 3 Stock Prep	VOC < 5 tpy
M40-212	Retention Aid Bulk Storage Tank	No. 3 Stock Prep	VOC < 5 tpy
M40-213	Retention aid Mix Tank	No. 3 Stock Prep	VOC < 5 tpy
M40-229	1-1/2% sulfuric Acid Tank	No. 3 Stock Prep	Emission Level < 5 tpy
M41-10	Vacuum Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-237	Oil surge Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-238	2000 gallon Oil Storage Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-239	2000 gallon Oil Storage Tank	No. 3 Paper Machine	VOC < 5 tpy
M40-245	Rotary Drum Filter Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-246	Rotary Drum filter Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-251	No. 1 Condensate Separator Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-253	No. 2 Condensate Separator Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-257	No. 4 Condensate Separator Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-260	Dryer Drainage Vacuum Receiver Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-265	No. 5 Condensate Separator Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-283	Fresh Water Collecting Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-387	Reclaimed Felt Wash Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-400	Vacuum Pit Water To Pulp Mill Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-405	Oil Surge Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-407	Dry end Reducer Lube System Oil Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-441	Oil surge Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-445	Sump Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-450	Condensate collection Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-460	High Pressure Pump Service Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-473	Headbox Body Temperature Control Water Tank	No. 3 Paper Machine	Insignificant Activity List (A.20)
M41-497	Mill Air Receiver Tank	No. 3 Paper Machine	Insignificant Activity List (A.25)
M41-540	Acid Water Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-655	Winder Lube Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-658	Winder Oil Surge Tank	No. 3 Paper Machine	VOC < 5 tpy
M41-685	Liebeck Pulper Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-784	Instrument Air Emergency Reserve Tank	No. 3 Paper Machine	Insignificant Activity List (A.25)
M41-905	W.E. Lube Oil sump Station No. 2 T.S.	No. 3 Paper Machine	VOC < 5 tpy
M41-1001	Caustic to Machine Rejects Storage Tank	No. 3 Paper Machine	Emission Level < 5 tpy
M41-1014	pH Water Heat Exchanger Condensate Tank	No. 3 Paper Machine	VOC < 5 tpy
M43-676	pH Water heat Exchanger Condensate tank	TMP	VOC < 5 tpy
M44-11	Hydrogen Peroxide Tank 'B'	TMP	Emission Level < 5 tpy
M44-194	Borol Storage Tank 'A'	TMP	Emission Level < 5 tpy
M44-198	Hydrosulfite Storage Tank	TMP	Emission Level < 5 tpy

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M44-201	Sulfur Dioxide Storage Tank 'A'	TMP	Emission Level < 5 tpy
M44-204	Cooling Water collection Tank	TMP	Insignificant Activity List (A.20)
M44-273	Sodium Silicate Storage Tank 'A'	TMP	Emission Level < 5 tpy
M44-274	Sodium Aluminate Tank 'A'	TMP	Emission Level < 5 tpy
M44-275	Sodium Aluminate Tank 'B'	TMP	Emission Level < 5 tpy
M44-277	Caustic Day Tank	TMP	Emission Level < 5 tpy
M44-309	Cooling Water Collection Tank	TMP	Insignificant Activity List (A.20)
M44-374	DTPA Storage Tank	TMP	Emission Level < 5 tpy
M44-385	Stpp Mix Tank	TMP	Emission Level < 5 tpy
M44-392	Zinc Sulfate Mix Tank	TMP	Emission Level < 5 tpy
M44-402	Sodium Aluminate Mix Tank	TMP	Emission Level < 5 tpy
M44-404	Borol Storage Tank 'B'	TMP	Emission Level < 5 tpy
M44-406	Alum Storage Tank	TMP	Emission Level < 5 tpy
M44-408	Alum Mix Tank	TMP	Emission Level < 5 tpy
M44-411	Sulfur Dioxide Storage Tank 'B'	TMP	Emission Level < 5 tpy
M44-413	Hydrogen Peroxide Tank 'C'	TMP	Emission Level < 5 tpy
M44-423	Zinc sulfate Day Tank	TMP	Emission Level < 5 tpy
M44-447	Sump Tank	TMP	Emission Level < 5 tpy
M44-468	Hot white Water Collection Tank	TMP	Emission Level < 5 tpy
M44-469	Sodium silicate Storage Tank 'B'	TMP	Emission Level < 5 tpy
M44-550	Hot Fresh Water Tank	TMP	Insignificant Activity List (A.20)
M44-725	Phosphate Day Tank	TMP	Emission Level < 5 tpy
M44-727	Oxygen Scavenger Day Tank	TMP	Emission Level < 5 tpy
M45-75	Stock Prep. Alum head Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-78	5% Caustic Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-79	Alum Mix Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-81	93% Sulfuric acid Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-87	1.5% Sulfuric Acid Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-99	Alum Mix Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-100	No. 1 East Dye Mix Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-102	No. 2 West Dye Mix Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-104	No. 1 Dye use Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-106	No. 2 Dye use Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-110	No. 3 Dye use tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-117	Soap Bulk tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-136	Retention aid bulk Tank	No. 2 Stock Prep	VOC < 5 tpy
M45-138	Clay Mix tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-138	Retention Aid Mix tank	No. 2 Stock Prep	VOC < 5 tpy
M45-155	Clay Use Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-200	Deaerator vessel Seal Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-225	Sulfuric Acid Inhibitor Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-566	Calcined clay storage Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M45-568	Sodium aluminate Tank	No. 2 Stock Prep	Emission Level < 5 tpy
M46-9	Felt Cleaning soap Head Tank	No. 2 Paper Machine	VOC < 5 tpy
M46-10	Felt Cleaning Kerosene Head Tank	No. 2 Paper Machine	VOC < 5 tpy
M46-11	Felt Cleaner Mix Tank	No. 2 Paper Machine	VOC < 5 tpy
M46-21	Felt Cleaner Use Tank	No. 2 Paper Machine	VOC < 5 tpy
M46-92	Press Section Air Compressor Tank	No. 2 Paper Machine	Insignificant Activity List (A.25)
M46-321	Cooling Water Reclaim Tank	No. 2 Paper Machine	Insignificant Activity List (A.20)
M46-507	pH Water Tank	No. 2 Paper Machine	VOC < 5 tpy

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M46-510	Retention aid Use Tank	No. 2 Paper Machine	VOC < 5 tpy
M46-614	Chilled Water System No. 2 Expansion Tank	No. 2 Paper Machine	Insignificant Activity List (A.20)
M46-521	Separator Seal Tank	No. 2 Paper Machine	Emission Level < 5 tpy
M46-788	Cooling Dryer separator Seal Tank	No. 2 Paper Machine	Emission Level < 5 tpy
M47-17	No. 3 Flash Tank	No. 2 Paper Machine	Emission Level < 5 tpy
M47-80	No. 2 Coating supply Tank	No. 2 Paper Machine	Emission Level < 5 tpy
M47-154	No. 1 Dye Mix Tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-156	No. 2 Dye Mix tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-158	No. 1 Dye Holding tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-160	No. 2 Dye Holding Tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-300	No. 3 Filler clay Tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-306	Viscosity Modifier Tank	No. 2 Coater Prep	Emission Level < 5 tpy
M47-308	No. 2 Dye Holding Tank	No. 2 Coater Prep	Emission Level < 5 tpy
M48-31	No. 1 Coating Service Tank	No. 2 Coater	Emission Level < 5 tpy
M48-129	Cooling Water Reclaim Tank	No. 2 Coater	Insignificant Activity List (A.20)
M48-259	No. 2 Coating Service Tank	No. 2 Coater	Emission Level < 5 tpy
M48-273	Chilled Water Tank	No. 2 Coater	Insignificant Activity List (A.20)
M48-280	Coated Broke Alum head Tank	No. 2 Coater	Emission Level < 5 tpy
M49-37	No. 3 S/C Temperature Control system Tank	No. 2 PM Finishing	Emission Level < 5 tpy
M49-88	No. 4 S/C Temperature Control system Tank	No. 2 PM Finishing	Emission Level < 5 tpy
M50-140	Digester Extraction surge Tank		Emission Level < 5 tpy
M50-390	Air Receiver Tank	No. 2 PM Shipping	Insignificant Activity List (A.25)
M50-393	LP Gas Tank	No. 2 PM Shipping	Insignificant Activity List (A.19)
M50-628	Trim Broke Pulper Tank	No. 2 PM Shipping	Emission Level < 5 tpy
M51-29	Condensate Receive surge Tank	No. 3 Recovery Furnace	Insignificant Activity List (A.20)
M51-30	Continuous Blowdown tank	No. 3 Recovery Furnace	Emission Level < 5 tpy
M51-31	Intermittent Blowdown Tank.	No. 3 Recovery Furnace	Emission Level < 5 tpy
M51-202	Defoamer bulk Storage Tank	No. 3 Recovery Furnace	VOC < 5 tpy
M51-204	Steam Condensate Surge Tank	No. 3 Recovery Furnace	Insignificant Activity List (A.20)
M51-255	No. 3 Condensate Separator tank	No. 3 Recovery Furnace	Insignificant Activity List (A.20)
M51-498	Nalco 2000 gallon Storage Tank	No. 3 Recovery Furnace	Emission Level < 5 tpy
M61-215	Alum Mix Tank	No. 3 TMP	Emission Level < 5 tpy
M61-285	Stpp Mix Tank	No. 3 TMP	Emission Level < 5 tpy
M61-309	Cooling Water Collection Tank	No. 3 TMP	Insignificant Activity List (A.20)
M61-422	V-Brite Storage Tank 'B'	No. 3 TMP	Emission Level < 5 tpy
M61-426	EDTA Storage Tank	No. 3 TMP	Emission Level < 5 tpy
M61-429	EDTA Day tank	No. 3 TMP	Emission Level < 5 tpy
M61-430	Zinc sulfate Day Tank	No. 3 TMP	Emission Level < 5 tpy
M62-91	Chilled Water Tank		Insignificant Activity List (A.20)
M63-630	Cal. Temp. Air Sys. Water Expansion Tank		Insignificant Activity List (A.20)
M14-30	White Liquor Measuring Tank	Digesters	Retired from service-Not permitted
M14-31	Black Liquor Measuring Tank	Digesters	Retired from service-Not permitted
M14-46	Hot water Storage Tank	Digesters	Retired from service-Not permitted

Table B-1 Insignificant Activities

Equip ID	Source Description	Location	Basis
M14-93	Blow Heat Accumulator Tank	Digesters	Retired from service-Not permitted
M15-01	Blow Tank No.1-South	BS Washers	Retired from service-Not permitted
M15-118	M-C PUMP To No. 3 Br. H.D. Standpipe	BS Washers	Retired from service-Not permitted
M15-125	Blow Tank No. 2 North	BS Washers	Retired from service-Not permitted
M15-174	No. 4 Black Liquor Filtrate Tank	BS Washers	Retired from service-Not permitted
M15-36	No. 1 Black Liquor Filtrate Tank	BS Washers	Retired from service-Not permitted
M15-40	No. 2 Black Liquor Filtrate Tank	BS Washers	Retired from service-Not permitted
M15-42	No. 3 Black Liquor Filtrate Tank	BS Washers	Retired from service-Not permitted
M15-44	Collecting Tank For No. 4 PSG shower	BS Washers	Retired from service-Not permitted
M15-64	Brown Stock Mixing Tank	BS Washers	Retired from service-Not permitted
M15-67	Soap Catch Tank	BS Washers	Retired from service-Not permitted
M16-112	No. 4 Decker Seal Tank	Screen Room	Retired from service-Not permitted
M16-120	Defoamer Bulk Storage Tank	Screen Room	Retired from service-Not permitted
M16-121	Defoamer Day Tank	Screen Room	Retired from service-Not permitted
M16-133	Woodyard White Water Surge Tank	Screen Room	Retired from service-Not permitted
M16-152	No. 5 Decker Seal Tank	Screen Room	Retired from service-Not permitted
M16-27	Chlorine Stage Deaeration Tank	Screen Room	Retired from service-Not permitted
M16-37	Secondary HeadBox	Screen Room	Retired from service-Not permitted
M17-212	No. 1 CLO 2 Tower	Bleach Plant	Retired from service-Not permitted
M17-2152	No. 1 Chlorine Dioxide Tower	Bleach Plant	Retired from service-Not permitted
M17-22	First Hypo Bleach Tower	Bleach Plant	Retired from service-Not permitted
M17-223	Fifth Washer Seal Tank	Bleach Plant	Retired from service-Not permitted
M17-377	10% Caustic Storage Tank	Bleach Plant	Retired from service-Not permitted
M17-390	No. 2 Washer Filtrate Deaeration Tank	Bleach Plant	Retired from service-Not permitted
M17-425	Fifth Stage M-C Pump StandPipe	Bleach Plant	Retired from service-Not permitted
M17-430	Chlorination Tower	Bleach Plant	Retired from service-Not permitted
M17-439	Oxygen Storage Tank	Bleach Plant	Retired from service-Not permitted
M17-50	Chlorine Washer Seal Tank	Bleach Plant	Retired from service-Not permitted
M17-52	Caustic Washer Seal Tank	Bleach Plant	Retired from service-Not permitted
M17-55	First HYPO Washer Seal Tank	Bleach Plant	Retired from service-Not permitted
M17-61	Bleach Plant Sewer Foam Tank	Bleach Plant	Retired from service-Not permitted
M17-79	20% Caustic Tank	Bleach Plant	Retired from service-Not permitted
M17-96	Fourth Washer Seal Tank	Bleach Plant	Retired from service-Not permitted
M25-12	No. 1 Recovery Dissolving Tank	No. 1 Recovery Furnace	Retired from service-Not permitted
M25-30	No. 1 Recovery Salt Cake Mix Tank	No. 1 Recovery Furnace	Retired from service-Not permitted
M25-80	No. 1 Recovery Slurry Tank	No. 1 Recovery Furnace	Retired from service-Not permitted
M27-56	Lime Mud tank	Causticizing	Retired from service-Not permitted
M28-20	No. 2 Bleach Liquor Tank	ClO ₂ Process	Retired from service-Not permitted
M28-34	Chloride Head Tank	ClO ₂ Process	Retired from service-Not permitted

No issues were observed at the time of the inspection in association with the insignificant activities.

CONCLUSION

No violations of permit conditions or applicable regulations were observed during this inspection.



September 29, 2015

VIA FEDERAL EXPRESS

Connie Turner
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Notice of Compliance Status: 40 CFR Subpart S – Bleach Plant Scrubber

Dear Connie:

We appreciated your insights and assistance during the recent air inspection. Based on your guidance we are submitting this notice of compliance status for the bleach plant scrubber. Based on March 31, 2015 in compliance test results submitted to the department, we are establishing a scrubber influent minimum flow of 140 gpm and ph of 10.9. All other parameters remain the same.

We reserve the right to conduct additional compliance tests in the future to establish a lower scrubber influent flow.

If you have any questions, please do not hesitate to contact me at dale.herendeen@resolutefp.com or 803-981-8009.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dale Herendeen', with a long horizontal flourish extending to the right.

Dale L. Herendeen
Environmental Manager
Resolute Forest Products

Enclosures

FedEx Package
Express US Airbill
FedEx
Tracking
Number

8089 0798 2809

Form
ID No.

0215

Sender's Copy

1 From Please print and press hard.

Date 9/28/15 Sender's FedEx Account Number 4705-2758-7

Sender's Name DALE HERENDEEN Phone (803) 981-8009

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City CATAWBA State SC ZIP 29704-7700

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First 24 characters will appear on invoice.

3 To

Recipient's Name LONNIE TURNER Phone ()

Company SCHEEL - BAQ

Address 2600 BULL ST. Dept./Floor/Suite/Room

Address Use this line for the HOLD location address or for continuation of your shipping address.

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Create labels. Go to fedex.com.

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* To most locations.

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☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

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6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice, 9, UN 1845 X kg ☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

 Total Packages Total Weight Total Declared Value¹
 lbs. \$.00

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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September 30, 2015

Mr. Heinz Kaiser
Manager, Air Toxics Section
Bureau of Air Quality Control
SC DHEC
2600 Bull Street
Columbia, SC 29201

Re: Extension Request - Boiler MACT as referenced by 40 CFR 63 Subparts A and DDDDD
Resolute FP US Inc. – Catawba Mill
Title V Permit No. TV-2440-0005

Dear Mr. Kaiser:

The purpose of this letter is to request a 1 year extension from 40 CFR Subpart DDDDD (Boiler MACT) as provided by 40 CFR 63.6(i). Under 63.6(i)(4)(i)(A):

"The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls.."

Table 10 to Subpart DDDDD of Part 63 notes that "facilities may also request extensions of compliance for the installation of combined heat and power, waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this subpart."

As noted at 63.6(i)(4)(i)(B), the request must be made in writing at least 120 days prior to the compliance date. The request for the extension must include all the information required at 63.6(i)(6)(i).

EPA Region 4 has delegated the authority to implement and enforce Subpart DDDDD to the South Carolina Department of Health and Environmental Control (DHEC) as of March 21, 2011. Therefore, we request DHEC provide a one-year compliance extension to the Catawba Mill for Subpart DDDDD affected sources.

Rule Background and Need for Extension

The No. 1 and No.2 combination boilers (CB1 and CB2) are classified as existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid. Resolute initiated a multi-phase project to upgrade the combination boilers for compliance with Boiler MACT requirements in December 2013. In April 2014, Resolute submitted a construction permit application for Phase 1 to upgrade the over fire air (OFA) system and the multi-clone dust collector (MDC) for each boiler to reduce emissions of carbon monoxide (CO) and opacity. In May 2014, this application was modified to a permit exemption request with the concurrence of the Department (exemption 2440-0005-05x). During Phase 1, Resolute invested approximately \$3,700,000 to upgrade CB1 and approximately \$2,800,000 to upgrade CB2. At the completion of Phase 1, both combination boilers were expected to meet the applicable Boiler MACT emission limits in Table 2 of Subpart DDDDD.

In spite of the capital spent during Phase 1, the continuous opacity monitoring system (COMS) data continues to indicate the daily average opacity may exceed the operational limit of 10% opacity for dry ESP's from Table 4 of Subpart DDDDD.

As a result of the higher than anticipated opacity following Phase 1, it may be necessary to continue with Phase 2 of the project and upgrade the ESP serving each combination boiler. EPA has indicated the 10% opacity operating limit in Table 4 of Subpart DDDDD will be revised as part of the "Reconsideration Rule" proposed on January 21, 2015. EPA intends to revise the opacity operating limit to the greater of 10% or the highest opacity during the performance stack test runs. This change will align the opacity monitoring with the other operating limits in Table 4 of Subpart DDDDD established based on performance tests. EPA currently anticipates the Reconsideration Rule will be final in October 2015. If the Reconsideration Rule becomes final before the January 31, 2016 compliance date, the compliance extension for the ESP upgrades will not be required.

Upgrading the ESP's to meet the opacity operational limit requires additional engineering, permitting, procurement, installation, operational testing and compliance testing prior to the compliance date.

Affected Units

This extension request applies to the following affected units:

Source	Control Device	Title V ID	Fuel(s)	Purpose	Relevant Standard/ Sub-category
No. 1 Combination Boiler 405 MMBTU/hr	Multi-clone and ESP	2605	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*
No. 2 Combination Boiler 720 MMBTU/hr	Multi-clone and ESP	3705	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*

*October 10, 2013 applicability determination.

These units were identified as being subject to Boiler MACT in the initial notification submitted to your office on May 20, 2013. This extension request applies to all emission limits, work practice standards, initial performance testing, site-specific monitoring plans, recordkeeping and reporting and all other requirements specified by 40 CFR 63, Subpart DDDDD.

Description of Process Change and Control Equipment Upgrades §63.6(i)(6)(i)(A)

Combination Boiler No. 1 (CB1)

During Phase 1, the OFA system was upgraded to provide more reliable and consistent combustion control to maintain compliance with the applicable CO emission limit. The OFA upgrade included new OFA air nozzles, a new OFA booster fan, new air-swept fuel spouts, and the associated piping, dampers, motors, etc. to more precisely control the air distribution within the boiler. The new air-swept fuel spouts also allow a more uniform fuel distribution across the grate, further improving combustion. The OFA system upgrade also reduced carry-over of particulate matter from the boiler into the downstream MDC.

The existing MDC was also upgraded during Phase 1 to maintain particulate matter and opacity emissions below the level required from hybrid suspension grate boilers. The MDC upgrades included installing larger tubes inside the existing multi-clone body and replacing deteriorating portions of the exterior shell.

The current compliance strategy involves upgrading the ESP to consistently meet the 10% opacity operating limit in Table 4 of Subpart DDDDD. The applicable emission limits from Table 2 of Subpart DDDDD are being achieved by the 2014 upgrades to the OFA system and MDC as shown in Table A below. No ESP upgrades were included in Phase 1.

Table A
Combination Boiler No. 1 PM Test Data Following Completion of Phase 1

Test Date	Run No.	Actual PM Emissions (lb/MMBtu)	PM Emission Limit (lb/MMBtu)	Percent of PM Emission Limit
4/1/2015	Run 1	0.032	0.44	7%
4/1/2015	Run 2	0.027	0.44	6%
4/1/2015	Run 3	0.026	0.44	6%

Although PM emissions following Phase 1 are well below the standard, opacity may not consistently remain below 10% under all operating conditions.

Phase 1 did not include any upgrades to the ESP. The Phase 2 ESP upgrades required to meet the opacity operating limit will consist of installing high frequency transformers serving each field of the ESP.

Combination Boiler No. 2 (CB2)

During Phase 1, the OFA system was upgraded to provide more reliable and consistent combustion control to maintain compliance with the applicable CO emission limit. The OFA upgrade included new OFA air nozzles, a new OFA booster fan, new air-swept fuel spouts, and the associated piping, dampers, motors, etc. to more precisely control the air distribution within the boiler. The new air-swept fuel spouts also allow a more uniform fuel distribution across the grate, further improving combustion. The OFA system upgrade also reduced carry-over of particulate matter from the boiler into the downstream MDC.

The existing MDC was also upgraded during Phase 1 to maintain particulate matter and opacity emissions below the level required from hybrid suspension grate boilers. The MDC upgrades included installing larger tubes inside the existing multi-clone body and replacing deteriorating portions of the exterior shell.

The current compliance strategy involves upgrading the ESP to meet the 10% opacity operating limit in Table 4 of Subpart DDDDD. The applicable emission limits from Table 2 of Subpart DDDDD are

being achieved by the 2014 upgrades to the OFA system and MDC as shown in Table B below. No ESP upgrades were included in Phase 1.

Table B
Combination Boiler No. 2 PM Test Data Following Completion of Phase 1

Test Date	Run No.	Actual PM Emissions (lb/MMBtu)	PM Emission Limit (lb/MMBtu)	Percent of PM Emission Limit
4/21/2015	Run 1	0.127	0.44	29%
4/21/2015	Run 2	0.104	0.44	24%
4/21/2015	Run 3	0.155	0.44	35%

Although PM emissions following Phase 1 are well below the standard, opacity is still not consistently below 10%.

Phase 1 did not include any upgrades to the ESP. The Phase 2 ESP upgrades required to meet the opacity operating limit will consist of installing high frequency transformers serving each field of the ESP.

Equipment suppliers have indicated there is insufficient time to engineer the upgrades, perform the fabrication, install the upgraded components, complete troubleshooting, acceptance testing, operator training, and perform the compliance test before the January 31, 2016 Boiler MACT compliance deadline.

The requested 1 year extension for boiler MACT is necessary to complete the following tasks:

- Project Development and Approval
- Contract Award
- Engineering and Fabrication
- Construction
- Commissioning and Start-up
- Compliance Testing

Compliance Schedule §63.6(i)(6)(i)(B)

Table C contains the proposed compliance schedule for Phase 2 based on the mill receiving the 1 year extension. Phase 2 is being managed as one project so the project milestone schedule applies to the ESP upgrades for CB1 and CB2.

Table C
Compliance Schedule

Project Milestone	Target Completion Date
Project Development and Approval	November 16, 2015
Contract Award	January 18, 2016
Engineering and Fabrication	July 20, 2016
Construction	November 17, 2016
Commissioning and Start-up	December 15, 2016
Compliance Testing	January 9, 2017
The date by which final compliance is to be achieved	January 31, 2017

Summary

The Catawba Mill has recently spent \$6,500,000 in capital preparing to comply with the Industrial Boiler MACT requirements of 40 CFR Part 63, Subpart DDDDD. Following the results of Phase 1 of our Boiler MACT compliance activities, additional capital will be required for a second phase. The engineering and fabrication time required to implement Phase 2 necessitates this compliance extension request.

Should you have any questions or comments regarding this request, please do not hesitate to contact Mr. Dale Herendeen of my staff at 803-981-8009. We appreciate your timely response to this request.

Sincerely,



Patrick Moore
General Manager
Resolute FP US Inc. – Catawba Mill

1 From Please print and press hard.

Date **9/30/15** Sender's FedEx Account Number **4705-2758-7**

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City **CATAWBA** State **SC** ZIP **29704-7700**

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September 18, 2015

VIA FEDERAL EXPRESS

Connie Turner
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Notice of Compliance Status: 40 CFR Subpart S – Bleach Plant Scrubber

Dear Connie:

We appreciated your insights and assistance during the recent air inspection. Based on your guidance we are submitting this notice of compliance status for the bleach plant scrubber. Based on March 31, 2015 in compliance test results submitted to the department, we are establishing a scrubber influent minimum flow of 140 gpm. All other parameters remain the same.

We reserve the right to conduct additional compliance tests in the future to establish a lower scrubber influent flow.

If you have any questions, please do not hesitate to contact me at dale.herendeen@resolutefp.com or 803-981-8009.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dale Herendeen', with a long horizontal flourish extending to the right.

Dale L. Herendeen
Environmental Manager
Resolute Forest Products

Enclosures

FedEx Package
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Form
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residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

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611



POWC MACT Information for Resolute Forest Products - Catawba

Barbara Sease to: turnercp

09/18/2015 10:07 AM

Cc: Dale Herendeen, Mike Swanson

Connie -

At your request, we compiled the information maintained by paper machine personnel to show compliance with the POWC MACT.

The attached spreadsheet shows the monthly coating usage and the amount of HAP, determining that the highest monthly average HAP content for the past 6 months is 2.02 E-5 kg HAP/kg coating, well below the 0.04 threshold.

We determined that "Insolubilizer, Seguearez 755" is the only coating component that contains HAP (0.7% glycol ether). We asked for the recipe for the highest usage of that component. See below the calculation of HAP content.

Component	Proportion (dry weight %)	% HAP	HAP Proportion (dry weight %)
Starch	5.8%	0.00%	0.0000%
Insolubilizer	0.3%	0.70%	0.0021%
Latex	7.0%	0.00%	0.0000%
Calcined Clay	9.6%	0.00%	0.0000%
Titanium Dioxide	2.6%	0.00%	0.0000%
Clay	74.8%	0.00%	0.0000%
TOTALS	100.0%		0.0021%

The wet weight percent would be much less than the maximum 0.002% dry weight (0.00002 kg HAP/kg coating), which is consistent with the the monthly maximum.

We will speak with your POWC MACT specialist soon to make sure we track compliance consistently with the regulation.



Thanks -2015-09-18-MACT JJJJ HAPs Tracking.pdf

Barbara

Barbara J. Sease, P.E.
Environmental - Air Quality
Catawba Operations
803.981.8759
bsease@resolutefp.com

SynTerra Corporation
148 River Street, Suite 220
Greenville, SC 29601
864.527.4608
bsease@synterracorp.com

Resolut FP - Catawba

PM2 Coating Mix HAPs Tracking for MACT JJJJ

				Mar-15		Apr-15		May-15	
Chemical Name	HAP	HAP %	Unit	lbs Coating	lbs HAP	lbs Coating	lbs HAP	lbs Coating	lbs HAP
Insolubilizer, Sequarez 755	Glycol Ethers	0.70%	lbs	21539	150.773	24950	174.65	32403	226.821
			lbs						
Total HAPs			lbs		150.77		174.65		226.82
			kg		68.53		79.39		103.10
Total Coating			kg	6,235,809.09		5,154,259.55		5,770,115.91	
HAP / Coating Ratio		kg HAP / kg Coating		1.09903E-05		1.54021E-05		1.7868E-05	
Compliance Ratio		kg HAP / kg Coating		0.04		0.04		0.04	
Compliance Status				Good		Good		Good	

Resolut FP - Catawba

PM2 Coating Mix HAPs Tracking for MACT JJJ

				Jun-15			Jul-15			Aug-15		
Chemical Name	HAP	HAP %	Unit	lbs Coating	lbs HAP		lbs Coating	lbs HAP		lbs Coating	lbs HAP	
Insolubilizer, Sequarez 755	Glycol Ethers	0.70%	lbs	31555	220.885		34298	240.086		27875	195.125	
			lbs									
Total HAPs			lbs		220.89			240.09			195.13	
			kg		100.40			109.13			88.69	
Total Coating			kg		6,540,775.45			5,402,725.00			4,628,918.18	
HAP / Coating Ratio	kg HAP / kg Coating				1.53502E-05			2.01991E-05			1.91607E-05	
Compliance Ratio	kg HAP / kg Coating				0.04			0.04			0.04	
Compliance Status					Good			Good			Good	



Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

FED EX NO. 8071 4221 5600

June 12, 2015

Mr. Paul Edinger
SCDHEC – Region 3 Lancaster EQC Office
2475 DHEC Road
Lancaster, SC 29720

Re: Excess Emission Report (No. 2), May 2015

Dear Mr. Moseley:

Resolute Forest Products – Catawba Operations experienced a vent of the Fiberline LVHC system on May 28th lasting 61 minutes, as the result of a system lock-out to facilitate a rupture disk replacement.

A complete report of the episode is attached for your review. If you have any questions concerning this information, please feel free to contact Dale Herendeen at 803-981-8009.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this report are true, accurate and complete.

Sincerely,

Patrick Moore
General Manager – Catawba Operations

BJS/dlh
File 209.17

Attachments

cc: Technical Management Section, SCDHEC BAQ, Columbia SC

EXCESS EMISSION REPORT
Excess Emission Episode
May 28, 2015

1. **Identity of the stack and/or emission point where the excess emissions occurred.**
The LVHC vents of the main Fiberline.

2. **The magnitude of the excess emission.**
See attached sheets for calculations.

3. **The time and duration of the excess emission.**

System	System Leg	Began	Ended	Duration (min)
LVHC (Fiberline)	Main	5/28/15 @ 12:23 PM	5/28/15 @ 1:24 PM	61

4. **The identity of the equipment causing the excess emission.**

Non-condensable gases from the digester system, pulp washing system, oxygen delignification system, and the knotting and screening system off gases are collected in a piping network called the high volume low concentration (HVLC) system. Non-condensable gases from the turpentine recovery system and evaporators are collected in a piping network called the low volume high concentration (LVHC) system. The gases from the HVLC and LVHC systems are collected and incinerated in one of two combination boilers.

5. **The nature and cause of such excess emission.**

The system vented when it was locked out to allow maintenance personnel to change a rupture disk.

6. **The steps taken to remedy the malfunction and the steps taken/planned to prevent recurrence.**

Maintenance personnel replaced the rupture disk and unlocked the system.

7. **The steps taken to limit the excess emission.**

The required repairs were accomplished as soon as possible.

8. **Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.**

We returned to normal operations, which are consistent with good practice for minimizing emissions, as soon as possible following the corrective actions.

NOTE: The calculations included with this letter are based on currently available data. However, due to a wide variability in parameters associated with the Kraft pulping process, the attached is provided only as an order of magnitude estimate and does not attempt to identify all of the organic/inorganic compounds which may be present in the vent stream at any given time.

Resolute Forest Products
Catawba Operations
LVHC Reporting Form

Date of Vent Episode:	May 28, 2015
Location of Venting:	Fiberline Vents
Duration of Vent:	61 minutes
Production Rate:	1533 ADTUBP
LVHC System	Vent Time of Source
Turpentine Recovery	61 minutes
No. 1 Evaporator	0 minutes
No. 2 Evaporator	0 minutes
No. 3 Evaporator	0 minutes
Total Emission Per Vent Episode (see below for detailed information):	
Methanol	0.1 pounds
TRS (as S)	0.3 pounds

Source	Emission Factor (lbs / ADTUBP)		Estimated Emissions (lbs/episode)	
	TRS	Methanol	TRS	Methanol
Turpentine Recovery	0.005	0.001	0.3	0.1
No. 1 Evaporator	0.594	0.137	0.0	0.0
No. 2 Evaporator	0.669	0.154	0.0	0.0
No. 3 Evaporator	0.867	0.199	0.0	0.0

Notes:

- (1) Emission factors for methanol were taken from the Air Pollution Engineering Manual, page 839, copyright 1992, Edited by Buonicore and Davis, Air and Waste Management Association.
- (2) Emission factors for TRS (as S) were taken from AP-42 (9/90).

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residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment Bill to:

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Total Packages **1** Total Weight **1** lbs. Total Declared Value¹ \$ **00**

¹Your liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

FED EX NO. 8071 4221 5585

May 26, 2015

Mr. Zach Pensa
SCDHEC – Region 3 Lancaster EQC Office
2475 DHEC Road
Lancaster, SC 29720

Re: Excess Emission Report, May 2015

Dear Mr. Pensa:

Resolute Forest Products – Catawba Operations experienced a vent of the Fiberline LVHC system on May 16th lasting 332 minutes, as the result of a broken wire on a rupture disk sensor.

A complete report of the episode is attached for your review. If you have any questions concerning this information, please feel free to contact Dale Herendeen at 803-981-8009.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this report are true, accurate and complete.

Sincerely,

Patrick Moore
General Manager – Catawba Operations

BJS/dlh
File 209.17

Attachments

cc: Technical Management Section, SCDHEC BAQ, Columbia SC

EXCESS EMISSION REPORT
Excess Emission Episode
May 16, 2015

1. **Identity of the stack and/or emission point where the excess emissions occurred.**
The LVHC vents of the main Fiberline.

2. **The magnitude of the excess emission.**
See attached sheets for calculations.

3. **The time and duration of the excess emission.**

System	System Leg	Began	Ended	Duration (min)
LVHC (Fiberline)	Main	5/16/15 @ 3:32 PM	5/16/15 @ 9:04 PM	332

4. **The identity of the equipment causing the excess emission.**

Non-condensable gases from the digester system, pulp washing system, oxygen delignification system, and the knotting and screening system off gases are collected in a piping network called the high volume low concentration (HVLC) system. Non-condensable gases from the turpentine recovery system and evaporators are collected in a piping network called the low volume high concentration (LVHC) system. The gases from the HVLC and LVHC systems are collected and incinerated in one of two combination boilers.

5. **The nature and cause of such excess emission.**

A broken wire on a rupture disk sensor caused system to react as though the rupture disk had burst, causing venting.

6. **The steps taken to remedy the malfunction and the steps taken/planned to prevent recurrence.**

Maintenance personnel replaced the rupture disk and repaired the broken wire on the rupture disk sensor.

7. **The steps taken to limit the excess emission.**

The required repairs were accomplished as soon as possible.

8. **Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.**

We returned to normal operations, which are consistent with good practice for minimizing emissions, as soon as possible following the corrective actions.

NOTE: The calculations included with this letter are based on currently available data. However, due to a wide variability in parameters associated with the Kraft pulping process, the attached is provided only as an order of magnitude estimate and does not attempt to identify all of the organic/inorganic compounds which may be present in the vent stream at any given time.

Resolute Forest Products
Catawba Operations
LVHC Reporting Form

Date of Vent Episode: May 16, 2015
Location of Venting: Fiberline Vents
Duration of Vent: 332 minutes
Production Rate: 1419 ADTUBP

LVHC System	Vent Time of Source
Turpentine Recovery	332 minutes
No. 1 Evaporator	0 minutes
No. 2 Evaporator	0 minutes
No. 3 Evaporator	0 minutes

Total Emission Per Vent Episode (see below for detailed information):	
Methanol	0.3 pounds
TRS (as S)	1.6 pounds

Source	Emission Factor (lbs / ADTUBP)		Estimated Emissions (lbs/episode)	
	TRS	Methanol	TRS	Methanol
Turpentine Recovery	0.005	0.001	1.6	0.3
No. 1 Evaporator	0.594	0.137	0.0	0.0
No. 2 Evaporator	0.669	0.154	0.0	0.0
No. 3 Evaporator	0.867	0.199	0.0	0.0

Notes:

- (1) Emission factors for methanol were taken from the Air Pollution Engineering Manual, page 839, copyright 1992, Edited by Buonicore and Davis, Air and Waste Management Association.
- (2) Emission factors for TRS (as S) were taken from AP-42 (9/90).

1 From Please print and press hard.

Date 5/26/15 Sender's FedEx Account Number 4705-2758-7

Sender's Name DALE HERENDEEN Phone (803) 817-4711

Company ABTIBIBOWATER

Address 5300 CURETON FERRY RD

City CATAWBA State SC ZIP 29704-7700

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

3 To

Recipient's Name ZACH DENSA Phone ()

Company SLDHEC - LANCASTER

Address 2475 DHEC Road

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Lancaster State SC ZIP 29720

0118254333

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

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Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ **FedEx Standard Overnight**
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ **FedEx 2Day A.M.**
Second business morning.* Saturday Delivery NOT available.

☐ **FedEx 2Day**
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx Express Saver**
Third business day.* Saturday Delivery NOT available.

5 Packaging

* Declared value limit \$500.

☒ **FedEx Envelope*** ☐ **FedEx Pak*** ☐ **FedEx Box** ☐ **FedEx Tube** ☐ **Other**

6 Special Handling and Delivery Signature Options

SATURDAY Delivery

NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.

☐ **Direct Signature**
Someone at recipient's address may sign for delivery. Fee applies.

☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ **No** ☐ **Yes** As per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required. ☐ **Dry Ice** Dry Ice, 9 UN 1845 x kg ☐ **Cargo Aircraft Only**

7 Payment Bill to:

☒ **Sender** Acct. No. in Section 1 will be billed. ☐ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Cash/Check** Exp. Date

Total Packages Total Weight Total Declared Value¹

lbs. \$.00

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Date _____ Sender's FedEx Account Number **4705-2758-7**

Sender's Name **DALE HERENDEEN** Phone (**803**) **817-4711**

Company **ADT/BOWATER RESOLUTE** **981 8009**

Address **5300 CURETON FERRY RD** Dept./Floor/Suite/Room _____

City **CATAWBA** State **SC** ZIP **29704-7700**

2 Your Internal Billing Reference
First 24 characters will appear on invoice.

3 To Recipient's Name **TECH MGMT SECTION** Phone () _____

Company **SCDHEC - AIR**

Address **2600 BULL ST** Dept./Floor/Suite/Room _____

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address _____
Use this line for the HOLD location address or for continuation of your shipping address.

City **COLUMBIA** State **SC** ZIP **29201**

0118254333

☐ **HOLD Weekday**
FedEx location address
REQUIRED. **NOT available for**
FedEx First Overnight.

☐ **HOLD Saturday**
FedEx location address
REQUIRED. **Available ONLY for**
FedEx Priority Overnight and
FedEx 2Day to select locations.

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

- ☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Priority Overnight**
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☒ **FedEx Standard Overnight**
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ **FedEx 2Day A.M.**
Second business morning.* Saturday Delivery NOT available.
- ☐ **FedEx 2Day**
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Express Saver**
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

- ☒ **FedEx Envelope*** ☐ **FedEx Pak*** ☐ **FedEx Box** ☐ **FedEx Tube** ☐ **Other**

6 Special Handling and Delivery Signature Options

- ☐ **SATURDAY Delivery**
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

- ☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.
- ☐ **Direct Signature**
Someone at recipient's address may sign for delivery. **Fee applies.**
- ☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. **Fee applies.**

Does this shipment contain dangerous goods?

- ☒ **No** ☐ **Yes** ☐ **Yes**
One box must be checked. As per attached Shipper's Declaration. Shipper's Declaration not required.
- ☐ **Dry Ice**
Dry Ice, 9, UN 1845 x kg
- ☐ **Cargo Aircraft Only**
- Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:

- Enter FedEx Acct. No. or Credit Card No. below.
- ☒ **Sender** Acct. No. in Section 1 will be billed. ☐ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
- FedEx Acct. No. Credit Card No. Exp. Date

Total Packages Total Weight Total Declared Value¹

lbs. \$.00

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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May 13, 2015

Ms. Mary Peyton D. Wall
Air Toxics Section
Bureau of Air Quality Control
SC DHEC
2600 Bull Street
Columbia, SC 29201

Re: Compliance Extension Request
Industrial Boiler MACT as referenced by 40 CFR 63 Subparts A and DDDDD
Resolute FP US Inc. – Catawba Mill
Title V Permit No. TV-2440-0005

Dear Ms. Wall:

The purpose of this letter is to withdraw our April 6, 2015 request for a 1-year compliance extension from 40 CFR Subpart DDDDD (Boiler MACT) as provided by 40 CFR 63.6(i).

Resolute FP US Inc. (Resolute) received your letter requesting additional information on April 17, 2015 in response to our April 6, 2015 request. As noted in your letter, Resolute has 30 days to provide the additional information regarding our request.

Resolute is currently evaluating the latest available information regarding the emissions from both boilers referenced in our request. Resolute believes there may be several possible compliance options available based on the most recent information. However, these evaluations will not be completed prior to the May 17 response deadline.

Resolute has concluded it is necessary to withdraw the compliance extension request at this time. Resolute has scheduled a meeting with the Department on May 28 to review the most up-to-date compliance information and possible compliance options for each boiler. Following our meeting, Resolute intends to submit a new compliance extension request. The new request will address the additional information in your letter received on April 17.

We appreciate the Department's attention to our request, and look forward to discussing our compliance strategies on May 28. Should you have any questions or comments please do not hesitate to contact Mr. Dale Herendeen of my staff at 803-981-8009.

Sincerely,

A handwritten signature in black ink, appearing to read 'Patrick Moore'.

Patrick Moore
General Manager
Resolute FP US Inc. – Catawba Mill

1 From Please print and press hard.

Date **5/13/15** Sender's FedEx Account Number **4705-2758-7**

Sender's Name **DALE HERENDEN** Phone (**803**) **817 4711**

Company **ADITIDIBOWATER RESOLUTE**

Address **5300 CURETON FERRY RD**

City **CATAWBA** State **SC** ZIP **29704-7700**

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

3 To

Recipient's Name **MARY PEXTON WALL** Phone ()

Company **SCHEC - BUREAU OF AIR**

Address **2600 BULL STREET**

City **COLUMBIA** State **SC** ZIP **29201**

0118254333



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4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

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Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon. Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning. Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day. Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

☒ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes ☐ As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 3 UN 1845 x kg ☐ Cargo Aircraft Only

7 Payment Bill to:

☒ Sender ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages Total Weight Total Declared Value*

*Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

April 15, 2015

RECEIVED 4/17/15
JK

Attn: Mr. Patrick Moore
Resolute Forest Products US Inc. – Catawba Mill
PO Box 7
Catawba, SC 29704-0007

Re: Compliance Extension Request for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD
Resolute Forest Products US Inc. – Catawba Mill, 2440-0005
No. 1 and No. 2 Combination Boilers (Equipment ID 2605 and 3705)

Dear Mr. Moore:


The U.S. Environmental Protection Agency (EPA) promulgated the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD (Boiler MACT) on January 31, 2013. On April 7, 2015, the South Carolina Department of Health and Environmental Control (Department) received a request from Resolute Forest Products US Inc. – Catawba Mill (Resolute FP) for a one year compliance extension for the Boiler MACT for the No. 1 and No. 2 Combination Boilers. Resolute FP is proposing to upgrade the electrostatic precipitator (ESP) serving each combination boiler to meet the Particulate Matter (PM) emission limit in the Boiler MACT.

To deem your compliance extension request for the above-referenced units complete and to continue the compliance extension process, the Department needs additional information. In accordance with 63.6(i)(12)(ii), your facility has 30 calendar days after receipt of this notice to provide the following information:

1. Provide a detailed description of necessary projects for the ESP upgrades and a schedule of target dates for each project and final compliance.
2. Provide a detailed list of the projects already conducted in phase 1 of the ESP upgrades and the necessary upgrades in phase 2 to achieve compliance with the Boiler MACT.
3. Provide a summary of the PM source test results and/or engineering calculations conducted after phase 1 and how they compare with the required Boiler MACT PM limit.

Once the above information is received, action on the compliance extension request can continue. If you have any questions, please contact me at 803-898-4064 or wallmp@dhec.sc.gov.

Sincerely,



Mary Peyton D. Wall
Air Toxics Section
Bureau of Air Quality

cc: 2440-0005 Compliance File

ec: Lee Page, EPA Region 4
Myra Reece, Air Quality – Central Office
Henry Porter, Air Quality – Central Office
Keith Frost, Air Quality – Central Office
Christopher Hardee, Air Quality – Central Office
Paul Edinger, Midlands EQC Region – Lancaster



2600 Bull Street
Columbia, SC 29201

Return Service Requested

MR PATRICK MOORE
RESOLUTE FP US INC - CATAWBA MILL
PO BOX 7
CATAWBA SC 29704-0007

neopostSM FIRST-CLASS MAIL
04/15/2015 PRSRT
US POSTAGE \$000.46
ZIP 29201
041L12203831

CYX-SMP 29704



EPA Region 4 has delegated the authority to implement and enforce Subpart DDDDD to the South Carolina Department of Health and Environmental Control (DHEC) as of March 21, 2011. Therefore, we request DHEC provide a one-year compliance extension to the Catawba Mill for Subpart DDDDD affected sources.

Rule Background and Need for Extension

The No. 1 and No.2 combination boilers are classified as existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid. Resolute initiated a multi-phase project to upgrade the combination boilers for compliance with Boiler MACT requirements in December 2013. In April 2014, Resolute submitted a construction permit application for Phase 1 to upgrade the over fire air (OFA) system and the multi-clone dust collector (MDC) for each boiler. In May 2014, this application was modified to a permit exemption request with the concurrence of the Department (exemption 2440-0005-05x). During Phase 1, Resolute invested approximately \$3,700,000 to upgrade the No. 1 combination boiler and approximately \$2,800,000 to upgrade the No. 2 combination boiler. As a result of Phase 1, both combination boilers are expected to meet the applicable Boiler MACT emission limits in Table 2.

In spite of the capital spent during Phase 1, the continuous opacity monitoring system (COMS) data continues to show the daily average opacity will exceed the operational limit of 10% opacity for dry ESP's from Table 4. As a result of the higher than anticipated opacity, it will be necessary to continue with Phase 2 of the project and upgrade the ESP serving each combination boiler. Upgrading the ESP's is one option to meet the opacity operational limit requires additional engineering, permitting, procurement, installation, operational testing and compliance testing prior to the compliance date.

Affected Units

This extension request applies to the following affected units:

Source	Control Device	Title V ID	Fuel(s)	Purpose	Relevant Standard/ Sub-category
No. 1 Combination Boiler 405 MMBTU/hr	Multi-clone and ESP	2605	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*
No. 2 Combination Boiler 720 MMBTU/hr	Multi-clone and ESP	3705	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*

*October 10, 2013 applicability determination.

This extension request applies to all emission limits, work practice standards, initial performance testing, site-specific monitoring plans, recordkeeping and reporting and all other requirements specified by 40 CFR 63, Subpart DDDDD.

Description of Process Change and Control Equipment Upgrades §63.6(i)(6)(i)(A)

The current compliance strategy for the No.1 and No. 2 combination boilers involves upgrading the ESP's to meet the 10% opacity operating limit in Table 4. The applicable emission limits from Table 2 are expected to be achieved by the 2014 upgrades to the overfire air system and multiclone dust collector serving each combination boiler.

Equipment suppliers have indicated there is insufficient time to engineer the upgrades, perform the fabrication, install the upgraded components, complete troubleshooting, acceptance testing, operator training, and perform the compliance test before the January 31, 2016 Boiler MACT compliance deadline.

The requested 1 year extension for boiler MACT is necessary to complete the following tasks:

- Issue RFP for Scope of Work
- Meet with suppliers and receive technical proposals
- Complete engineering study and cost estimate
- Prepare construction permit application(s) and/or exemption request(s)
- Request capital funds
- Purchase, fabricate, and deliver equipment and materials
- Complete upgrades and operator training
- Performance testing

Compliance Schedule §63.6(i)(6)(i)(B)

The following is a summary of the proposed compliance schedule for the project based on the mill receiving the 1 year extension.

Project Milestone	Target Date
Complete Biennial Combination Boiler PM Compliance Testing	April 2015
AirTek to conduct an initial review of test data, equipment and operation/controls	April 2015 – June 2015
Review Combination Boiler PM and Opacity Testing Results	May – June 2015
Issue RFP's and SOW's	July 2015
Submit Construction Permit Application/Exemption Request	July 2015
Interview Suppliers and Receive Technical Proposals	August 2015
Receive Permit Exemption (if qualified)	August 2015
Prepare FEL1 Estimate for Capital Fund Request	September 2015
Submit Request for Capital Funds	September 2015
Receive Construction Permit (if required)	October 2015
Approval of Capital and Supplier Selections/Notifications	November 2015
Purchase, Fabricate, and Deliver Equipment and Materials	December 2015 – August 2016
Installation during Scheduled Boiler Outages	September – October 2016
Troubleshooting and Acceptance Testing	October 2016 – November 2016
Compliance Testing	December 2016 – January 2017
The date by which final compliance is to be achieved	January 31, 2017

Summary

The Catawba Mill has recently spent \$6,500,000 in capital preparing to comply with the Industrial Boiler MACT requirements of 40 CFR Part 63, Subpart DDDDD. Following the results of Phase 1 of our Boiler

MACT compliance activities, additional capital will be required for a second phase. The engineering and fabrication time required to implement Phase 2 necessitates this compliance extension request. In addition, other options are being evaluated with the assistance of AirTek and AECOM.

Should you have any questions or comments regarding this request, please do not hesitate to contact Mr. Dale Herendeen of my staff at 803-981-8009. We appreciate your timely response to this request.

Sincerely,

Patrick Moore
General Manager
Resolute FP US Inc. – Catawba Mill



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

April 27, 2015

Resolute FP US, Inc.
PO Box 7
Catawba SC 29704
Attn: Mr. Dale Herendeen

Re: Enforcement Conference held April 7, 2015

Dear Mr. Herendeen:

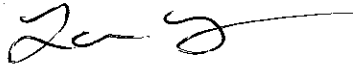
On March 17, 2015, the Department issued a Notice of Alleged Violation and Notice of Enforcement Conference to Resolute FP US, Inc. ("Resolute") for failure to limit NOx emissions from ID 5105 to less than or equal to 78 ppmv @ 8% O₂ (10-day rolling average) from December 10, 2014, through December 17, 2014.

On April 7, 2015, representatives of Resolute attended an enforcement conference at the Department to discuss the alleged violations. During the conference, Resolute stated that the NOx values initially reported on the semi-annual report were in error due to a CEMS malfunction. Resolute provided documentation of repair work performed on the CEMS, training and support given to maintenance personnel, and corrected NOx calculations demonstrating that NOx emissions did not exceed the limit. Based upon information presented during and subsequent to the conference, the Department determined that a violation did not occur.

Please be advised that Title V Air Quality Permit TV-2440-0005 requires Resolute to properly operate and maintain its CEMS. Future violations of the Permit and/or applicable regulations may result in the Department taking further enforcement action, including the assessment of civil penalties.

Thank you for your cooperation in resolving this matter, and if you have any questions, please contact me by telephone at (803) 898-1794 or e-mail at greenelc@dhec.sc.gov.

Sincerely,



Lauren Greene
Air Enforcement Section
Bureau of Air Quality

(00-8251NFA)

cc: Compliance File 2440-0005
ec: S. Adams, Region 4 EPA
D. Meekins, B. Decker, K. Buckner, and R. Stewart, BAQ



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

March 17, 2015

CERTIFIED MAIL

9214 8969 0099 9790 1400 2942 56

Resolute FP US, Inc.
PO Box 7
Catawba SC 29704
Attn: Mr. Dale Herendeen

**Re: NOTICE OF ALLEGED VIOLATION
NOTICE OF ENFORCEMENT CONFERENCE – April 7, 2015 at 9:30 a.m.**

Dear Mr. Herendeen:

Please find enclosed a Notice of Alleged Violation and Notice of Enforcement Conference for Resolute FP US, Inc. ("Resolute") based upon the findings of a review of Department records conducted on January 27, 2015.

The scheduled enforcement conference will provide Resolute and the Department the opportunity to discuss the alleged violations. Please plan to attend the conference or ensure that a representative authorized to speak on the behalf of Resolute attends.

Also enclosed is a document entitled *An Overview of the Administrative Enforcement Process*. If you have any questions regarding this matter, please telephone me at (803) 898-1794, or email me at greenelc@dhec.sc.gov.

Sincerely,

Lauren Greene
Air Enforcement Section
Bureau of Air Quality

(00-8251)

cc: Compliance File 2440-0005
ec: B. Decker, K. Buckner, and R. Stewart, BAQ

Enclosures

**STATE OF SOUTH CAROLINA
BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

**IN RE: RESOLUTE FP US, INC.
YORK COUNTY**

NOTICE OF ALLEGED VIOLATION/NOTICE OF ENFORCEMENT CONFERENCE

RESOLUTE FP US, INC ("Resolute") IS HEREBY NOTIFIED that an enforcement conference has been scheduled for Tuesday April 7, 2015, at 9:30 a.m. in the offices of the Bureau of Air Quality, Aycock Building, 2600 Bull Street, Columbia, South Carolina. Representatives of Resolute have the opportunity to be present at this conference to discuss the alleged violations of the statutes and/or regulations cited herein.

Representatives of Resolute may be accompanied at the conference by legal and/or technical counsel. The possibility of a Consent Order may be discussed.

This Notice is based upon the following findings of the Department:

1. Resolute owns and operates an integrated pulp and paper mill at its facility located at 5300 Cureton Ferry Road in Catawba, South Carolina. Business filings at the Office of the South Carolina Secretary of State list Resolute as an incorporated entity in Delaware.
2. The Department issued Part 70 Air Quality Permit TV-2440-0005 ("Title V Permit") to Bowater Coated and Specialty Papers Division, effective October 1, 2008. On January 19, 2011, the Title V Permit was revised as the facility name changed to AbiBow US Inc. – Catawba, and on February 6, 2013, the Title V Permit was revised as the facility name changed to Resolute. The Title V Permit expired on September 30, 2013. Resolute submitted a complete renewal application in a timely manner that is currently under review by the Department.
3. The Title V Permit authorizes Resolute to operate a chemical recovery process where two recovery furnaces ("ID 2505" and "ID 5105") are used for burning black liquor solids to produce steam and to recover chemicals for use in the pulping process. ID 2505 can also burn No. 6 fuel oil, and ID 5105 can also burn No. 6 fuel oil and natural gas.
4. Resolute has accepted federally enforceable limits on Nitrogen Oxides ("NOx") emissions to remain in compliance with South Carolina Standard 7 – Prevention of Significant Deterioration ("PSD") best available control technology ("BACT"), and SC Standard 7.1 - Nonattainment New Source Review ("NSR") lowest achievable emissions rate ("LAER").

5. Condition 7.12 of the Title V Permit requires Resolute to demonstrate compliance with PSD/BACT and NSR/LAER, in part, by limiting NOx emissions from ID 5105 to less than or equal to 78 ppmv @ 8% O₂ (10-day rolling average). ID 5105 is equipped with a 4th level of air to aid in good combustion control of NOx. A NOx CEMS is required on ID 5105 for demonstrating compliance with the applicable limits.

6. 5 South Carolina Code Ann. Regs. 61-62.1 (Supp. 2013), Section II, *Permit Requirements*, requires an owner or operator to comply with all terms, conditions, and limitations of any Department-issued permit for sources or activities at its facility.

7. On January 27, 2015, a review of Department records indicated that Resolute exceeded the 78 ppmv 10-day rolling average NOx emission limit for ID 5105 each day from December 10, 2014, through December 17, 2014.


From the above findings, the Department alleges that Resolute has violated the following:

5 S.C. Code Ann. Regs. 61-62.1, Section II, *Permit Requirements*, and Standards No. 7 and 7.1, in that it failed to limit 10-day rolling average NOx emissions for ID 5105C to 78 ppmv from December 10, 2014, through December 17, 2014.

RESOLUTE IS FURTHER NOTIFIED that failure to attend the scheduled enforcement conference may result in the issuance of an Administrative Order without your consent. Such an Order may contain the above findings and may impose monetary penalties.

This Notice is made pursuant to S.C. Code Ann. § 48-1-50 (Supp. 2013), which authorize(s) the Department to issue Orders and assess monetary penalties.

March 17, 2015



Lauren Greene
Air Enforcement Section
Bureau of Air Quality

(00-8251)

South Carolina Department of Health & Environmental Control
Office of Environmental Quality Control
January 2010

An Overview of the Administrative Enforcement Process

This document is provided as guidance and should not be relied upon as legal advice.

Introduction

This information sheet has been prepared to help you better understand the SC Department of Health and Environmental Control's (Department) enforcement process. Since you received a Notice of Alleged Violation/Notice of Enforcement Conference (NOAV/NOEC), we want you to adequately prepare to meet with staff to resolve this matter of regulatory concern. It is the Department's foremost goal to assist you in maintaining full compliance. Enforcement is one tool to help ensure that obligations to safeguard the environment are met through strict adherence to regulations and environmental permit requirements, terms, and conditions are fulfilled. The following are answers to questions most frequently asked by people involved in this process.

What is a Notice of Alleged Violation/Notice of Enforcement Conference (NOAV/NOEC)?

The NOAV/NOEC is the first step in the administrative enforcement process. When it is discovered that an environmental law or regulation may have been violated, a NOAV/NOEC may be issued. The notice outlines the Office of Environmental Quality Control's (EQC) findings, identifies the law, regulation, or permit requirement EQC believes was violated, and invites the responsible party (Respondent) to attend an enforcement conference. The Respondent may accept EQC's findings and elect not to attend a conference, in which case an order is drafted, if appropriate, for the Respondent's review and signature.

Why is an enforcement action necessary?

There are different factors considered by EQC staff when deciding to initiate an enforcement action. Most fall within the following: 1) the specific type of alleged violation identified may require EQC to take a formal enforcement action, 2) the alleged violation is serious or a threat to public health or the environment,

or 3) the alleged violation has not been corrected within a reasonable period of time.

What is an enforcement conference and what can I do to prepare for it?

The enforcement conference is a voluntary, informal meeting between EQC staff and the Respondent. The NOAV/NOEC you received contains a summary of known issues of regulatory concern and provides the basis for discussion. It is important to be fully prepared to present any information that will enable staff to make a fair and sound decision concerning the allegations. You should also be prepared to report any corrective action(s) taken or planned.

Who should I bring to the conference and who from EQC will be present?

People who are most familiar with the issues and who have decision-making authority on behalf of the Respondent should plan to attend. You may have legal and/or technical representation if you choose. An enforcement project manager, regional staff, technical support, and other compliance personnel involved with the matter will represent the Department. A staff attorney representing EQC is generally not in attendance. However, if you choose to have legal counsel present, you are asked to notify the Department at least five days prior to the conference and the Department may decide to have agency legal counsel attend. Also, if the Department determines it is necessary for legal counsel to be present you will be notified at least five days prior to the conference. The enforcement conference is closed to the public and media per a DHEC Board approved policy.

What can I expect to happen at the enforcement conference and what may result?

As the Respondent, you can expect a fair evaluation of the circumstances surrounding the issues of concern. Staff will ask questions and determine a reasonable response based upon consideration of the facts. After the conference, staff will review the information gathered and decide on one of four possible outcomes: 1) the Department determines that the event is not a violation and is dismissed; 2) the Department determines the violation is properly alleged, but there is justification to resolve the matter without the issuance of an order; 3) the Department determines the violation is properly alleged, and you are given the opportunity to resolve the issue by entering into a Consent Order with the Department; or 4) the Department determines the violation is properly alleged and an Administrative (unilateral) Order is issued.

What is a consent order?

A Consent Order is a legally binding, enforceable document, with terms and conditions agreed upon by you and the Department. In signing a Consent Order, you waive your right to an administrative appeal, but the additional time and costs associated with an administrative hearing and other potential court-related costs are avoided.

What is the purpose of a civil penalty; how is the penalty amount determined; and who gets the money?

Civil penalties are issued for the violation of federal and state environmental laws. The decision to assess a penalty depends upon the type of violation alleged and other factors. Among other factors, civil penalties are intended to deter future noncompliance and eliminate any economic incentive for noncompliance. The penalty is calculated in accordance with the Department's Uniform Enforcement Policy. The amount of the civil penalty is designed to reflect the frequency, duration, and severity of the violation(s). Some other factors may be considered, such as compliance history, degree of negligence or willfulness, and economic benefit gained through noncompliance. The money collected is either sent to the State's General Fund, or a portion to the county in which the violation occurred, or otherwise dispersed as required by state law.

If I have corrected the noted violations, why would a civil penalty still be assessed?

To promote fairness and consistency within the administrative enforcement process, civil penalties are typically assessed for certain violations. However, if you demonstrate good faith efforts to promptly correct the alleged violation, staff will favorably consider these actions when calculating any penalty. Other factors that may affect the penalty amount include measures taken to prevent recurrence and other mitigating factors.

Why should I attempt to resolve the enforcement action with a consent order?

There are often significant savings in time and money when the parties in an enforcement action can reach an agreed upon resolution. If, however, an agreement to the terms, conditions and/or any civil penalty proposed in a Consent Order cannot be reached, the Department may issue an Administrative (unilateral) Order without your consent. The Administrative Order would include findings of fact, conclusions of law, and contain specific requirements addressing the violation(s) and the civil penalty may be higher based on factors under consideration.

If an agreed upon resolution is not reached and an order is issued without my consent, what are my options?

A Respondent may seek further review as set forth in the Notice of Appeal Procedure which is on the Department's Website at:

http://www.scdhec.gov/environment/baq/docs/DepartmentDecisions/Notice_of_Appeal_Procedure.pdf



South Carolina Department of Health
and Environmental Control



Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

| FED EX NO. 8071 4221 5780

April 10, 2015

Ms. Lauren Greene
Division of Compliance Management – Enforcement Section
SCDHEC – Bureau of Air Quality
2600 Bull Street
Columbia, SC 29201-1708

Re: April 7, 2015 Enforcement Conference Responses

Dear Ms. Greene:

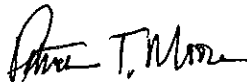
We appreciate the opportunity provided by you and your colleagues to discuss the alleged violation regarding No. 3 recovery boiler. Listed below are our responses to the questions raised during the enforcement conference:

1. We have attached the purchase orders issued to Environmental 360 Inc. to install new monitor air filtration systems on the No. 3 recovery boiler NOx monitor. In addition, we are installing similar systems on No. 2 recovery boiler and lime kiln TRS monitors. The work is scheduled to be completed the week of May 18, 2015.
2. We have attached a purchase order issued to Environmental 360 Inc. to provide training and support to our COM/CEM's maintenance program. Environmental 360 Inc. has been and will continue to work with our technicians to improve their expertise and knowledge.
3. We are reviewing the option of having quarterly support from an outside expert contractor.
4. After extensive review of our available records, we could not find a similar period of burning No. 6 oil in No. 3 recovery boiler for any significant period of time. As stated during the conference, our objective is to avoid burning No. 6 in No. 3 recovery boiler. Another factor that hindered this effort was our ability to definitively link any period with the burning of No. 6 fuel oil. But in the future this will be easier as during the March 2015 annual outage we have improved our No. 6 fuel measurement systems on No. 3 recovery boiler.

Based on information and belief formed after reasonable inquiry, I certify to the best of my knowledge, that the statements and information in this submission are true, accurate, and complete.

Thank you for allowing us this opportunity to address your concerns. If there are any questions, please feel free to contact Dale Herendeen at (803) 981-8009.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick T. Moore". The signature is fluid and cursive, with the first name "Patrick" and last name "Moore" clearly distinguishable.

Patrick Moore
General Manager

PM/dlh
File 208.16

Enclosures



PURCHASE ORDER NO. 583007

Rev 0

P.O. Date	03/18/2015
Rev. Date	03/18/2015

Page 1 of 2

TO : ENVIRONMENTAL 360 INC.
2159 NORTH THOMPSON LN
STE. B-6
MURFREESBORO, TN 37129

SHIP TO : ResoluteFP US Inc.
Catawba Main Storeroom Receiving
5300 Cureton Ferry Road
P.O. Box 7
CATAWBA, SC 29704

SUPPLIER CODE: 18056
FAX: 877-545-3360

INVOICE: ResoluteFP US Inc
Catawba Accounts Payable
PO Box 7
CATAWBA, SC 29704

Contact: DAVID OWEN
Phone: 877-545-3360
Fax: 877-545-3360

BUYER: Dan Phelan
Phone: 803-981-8672
Fax: 803-981-8260
Email: Dan.Phelan@ResoluteFP.com

PLEASE FURNISH MATERIAL OR SERVICE BELOW SUBJECT TO TERMS AND CONDITIONS OF THIS ORDER. NO SUBSTITUTIONS TO THE DESCRIPTION OR CHANGES TO THE PRICE ARE ALLOWED, UNLESS APPROVED BY THE BUYER PRIOR TO SHIPMENT.

DELIVER BEFORE 03/18/2015 **PAYMENT TERMS** NET 60 **SHIP VIA** :
FREIGHT TERMS: ORIGIN PPD & INVOICED

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
------	----------	-----	---------------------	------------

1	1.00	\$	Customer Catalog #: SL457815 SERVICE LABOR FOR ENVIRONMENTAL 360 TO INSTALL A DILUTION SYSTEM ZERO AIR GENERATOR (AIR CLEANUP SYSTEM), PART NUMBER PW-300, COMPOSED OF A TWIN TOWER ENGINEERING HR SERIES REGENERATIVE DESSICANT AIR DRYER USING PRESSURE SWING ABSORPTION TECHNOLOGY TO REMOVE TRACE AMOUNTS OF NITRIC OXIDES AND SULFUR COMPOUNDS, ITS GAS AMBIENT AIR PURIFICATION FOR PARTICULATE, CO, CO2, SO2, NOx AND THC, INSTALL TWIN TOWER VCM3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A TWIN TOWER VCD3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A PURAFILL AND ACTIVATED CARBON SO2, NOx AND THC SCRUBBER, INSTALL A 10 LITER ACCUMULATOR TANK, INCLUDING 30 HOURS OF ON-SITE MAINTENANCE, INSTALLATION AND PM DURING THE MARCH 2015 OUTAGE TO RETROFIT THE ORIFICES ON RB 3 , AND INSPECT RB2, RB3 AND LIME KILN, ENVIRONMENTAL 360 WILL INSTALL THE CLEANUP PACKAGE ON RB 2, RB 3, AND	10,744.00000
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IMPORTANT INSTRUCTIONS

- > Please acknowledge receipt and obtain approval from the buyer for price changes prior to shipping, also specify shipping date by fax or email.
- > Send itemized invoice to Accounts Payable - original only (EXCEPT for Pay on Receipt PO).
- > All other correspondence is to be sent to Purchasing Department.
- > Cash discount period will date from receipt of correctly executed invoice (EXCEPT for Pay on Receipt PO).
- > Please furnish the goods and services described herein subject to terms and conditions of this purchase order. Unless otherwise agreed in a written instrument signed by an authorized representative of each of the parties, Resolute's General Terms and Conditions - February 2014 apply to all acquisitions of goods and services by Resolute pursuant to this purchase order. A copy of Resolute's General Terms and Conditions - February 2014 may be obtained at www.resolutefp.com under the quick link: Procurement - General Terms and Conditions.



PURCHASE ORDER NO. 583007
Rev 0

P.O. Date	03/18/2015
Rev. Date	03/18/2015

Page 2 of 2

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
			LIME KILN DURING THE 30 HOURS OF SERVICE. E-MAIL QUOTE FROM RICK JOYER (ENVIRONMENTAL 360)	

Tax: South Carolina Exempt

TAG EACH PART WITH OUR CATALOG NUMBER

Total:	USD \$	10,744.00
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IMPORTANT INSTRUCTIONS

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- > Send itemized invoice to Accounts Payable - original only (EXCEPT for Pay on Receipt PO).
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PURCHASE ORDER NO. 583008

Rev 0

P.O. Date	03/18/2015
Rev. Date	03/18/2015

Page 1 of 2

TO: ENVIRONMENTAL 360 INC.
2159 NORTH THOMPSON LN
STE. B-6
MURFREESBORO, TN 37129

SHIP TO : Resolute FP US Inc.
Catawba Main Storeroom Receiving
5300 Cureton Ferry Road
P.O. Box 7
CATAWBA, SC 29704

SUPPLIER CODE: 18056
FAX: 877-545-3360

INVOICE: Resolute FP US Inc
Catawba Accounts Payable
PO Box 7
CATAWBA, SC 29704

Contact: DAVID OWEN
Phone: 877-545-3360
Fax: 877-545-3360

BUYER: Dan Phelan
Phone: 803-981-8672
Fax: 803-981-8260
Email: Dan.Phelan@ResoluteFP.com

PLEASE FURNISH MATERIAL OR SERVICE BELOW SUBJECT TO TERMS AND CONDITIONS OF THIS ORDER. NO SUBSTITUTIONS TO THE DESCRIPTION OR CHANGES TO THE PRICE ARE ALLOWED, UNLESS APPROVED BY THE BUYER PRIOR TO SHIPMENT.

DELIVER BEFORE 03/18/2015 **PAYMENT TERMS** NET 60 **SHIP VIA** : **FREIGHT TERMS:** ORIGIN PPD & INVOICED

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
------	----------	-----	---------------------	------------

NOTE: MILL CONTACT IS SEAN GLEASON AT 803-981-8108.

1	1.00	Hrs	Customer Catalog #: SL457816 SERVICE LABOR FOR ENVIRONMENTAL 360 TO INSTALL A DILUTION SYSTEM ZERO AIR GENERATOR (AIR CLEANUP SYSTEM), PART NUMBER PW-300, COMPOSED OF A TWIN TOWER ENGINEERING HR SERIES REGENERATIVE DESSICANT AIR DRYER USING PRESSURE SWING ABSORPTION TECHNOLOGY TO REMOVE TRACE AMOUNTS OF NITRIC OXIDES AND SULFUR COMPOUNDS, ITS GAS AMBIENT AIR PURIFICATION FOR PARTICULATE, CO, CO2, SO2, NOx AND THC, INSTALL TWIN TOWER VCM3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A TWIN TOWER VCD3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A PURAFILL AND ACTIVATED CARBON SO2, NOx AND THC SCRUBBER, INSTALL A 10 LITER ACCUMULATOR TANK, INCLUDING 30 HOURS OF ON-SITE MAINTENANCE, INSTALLATION AND PM DURING THE MARCH 2015 OUTAGE TO RETROFIT THE ORIFICES ON RB 3 , AND INSPECT RB2, RB3 AND LIME KILN, ENVIRONMENTAL 360	10,744.00000
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IMPORTANT INSTRUCTIONS

- > Please acknowledge receipt and obtain approval from the buyer for price changes prior to shipping, also specify shipping date by fax or email.
- > Send itemized invoice to Accounts Payable - original only (EXCEPT for Pay on Receipt PO).
- > All other correspondence is to be sent to Purchasing Department.
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PURCHASE ORDER NO. 583008
Rev 0

P.O. Date	03/18/2015
Rev. Date	03/18/2015

Page 2 of 2

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
			WILL INSTALL THE CLEANUP PACKAGE ON RB 2, RB 3, AND LIME KILN DURING THE 30 HOURS OF SERVICE. E-MAIL QUOTE FROM RICK JOYER (ENVIRONMENTAL 360)	

Tax: South Carolina Exempt

TAG EACH PART WITH OUR CATALOG NUMBER

Total:	USD \$	10,744.00
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IMPORTANT INSTRUCTIONS

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- > Cash discount period will date from receipt of correctly executed invoice (EXCEPT for Pay on Receipt PO).
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PURCHASE ORDER NO. 583567

Rev 0

P.O. Date	03/23/2015
Rev. Date	03/23/2015

Page 1 of 2

TO : ENVIRONMENTAL 360 INC.
2159 NORTH THOMPSON LN
STE. B-6
MURFREESBORO, TN 37129

SHIP TO : Resolute FP US Inc.
Catawba Main Storeroom Receiving
5300 Cureton Ferry Road
P.O. Box 7
CATAWBA, SC 29704

SUPPLIER CODE: 18056
FAX: 877-545-3360

INVOICE: Resolute FP US Inc
Catawba Accounts Payable
PO Box 7
CATAWBA, SC 29704

Contact: DAVID OWEN
Phone: 877-545-3360
Fax: 877-545-3360

BUYER: Dan Phelan
Phone: 803-981-8672
Fax: 803-981-8260
Email: Dan.Phelan@ResoluteFP.com

PLEASE FURNISH MATERIAL OR SERVICE BELOW SUBJECT TO TERMS AND CONDITIONS OF THIS ORDER. NO SUBSTITUTIONS TO THE DESCRIPTION OR CHANGES TO THE PRICE ARE ALLOWED, UNLESS APPROVED BY THE BUYER PRIOR TO SHIPMENT.

DELIVER BEFORE 03/23/2015 PAYMENT TERMS NET 60 SHIP VIA :
FREIGHT TERMS: ORIGIN PPD & INVOICED

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
------	----------	-----	---------------------	------------

1	1.00	\$	Customer Catalog #: SL457814 SERVICE LABOR FOR ENVIRONMENTAL 360 TO INSTALL A DILUTION SYSTEM ZERO AIR GENERATOR (AIR CLEANUP SYSTEM), PART NUMBER PW-300, COMPOSED OF A TWIN TOWER ENGINEERING HR SERIES REGENERATIVE DESSICANT AIR DRYER USING PRESSURE SWING ABSORPTION TECHNOLOGY TO REMOVE TRACE AMOUNTS OF NITRIC OXIDES AND SULFUR COMPOUNDS, ITS GAS AMBIENT AIR PURIFICATION FOR PARTICULATE, CO, CO2, SO2, NOx AND THC, INSTALL TWIN TOWER VCM3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A TWIN TOWER VCD3-11 REGENERATIVE CO2 SCRUBBER/DRIER, INSTALL A PURAFILL AND ACTIVATED CARBON SO2, NOx AND THC SCRUBBER, INSTALL A 10 LITER ACCUMULATOR TANK, INCLUDING 30 HOURS OF ON-SITE MAINTENANCE, INSTALLATION AND PM DURING THE MARCH 2015 OUTAGE TO RETROFIT THE ORIFICES ON RB 3 , AND INSPECT RB2, RB3 AND LIME KILN, ENVIRONMENTAL 360 WILL INSTALL THE CLEANUP PACKAGE ON RB 2, RB 3, AND	10,744.00000
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IMPORTANT INSTRUCTIONS

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- > All other correspondence is to be sent to Purchasing Department.
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PURCHASE ORDER NO. 583567
Rev 0

P.O. Date	03/23/2015
Rev. Date	03/23/2015

Page 2 of 2

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
			LIME KILN DURING THE 30 HOURS OF SERVICE. E-MAIL QUOTE FROM RICK JOYER (ENVIRONMENTAL 360)	

Tax: South Carolina Exempt

TAG EACH PART WITH OUR CATALOG NUMBER

Total:	USD \$	10,744.00
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PURCHASE ORDER NO. 580463

Rev 0

P.O. Date	02/27/2015
Rev. Date	02/27/2015

Page 1 of 1

TO : ENVIRONMENTAL 360 INC.
2159 NORTH THOMPSON LN
STE. B-6
MURFREESBORO, TN 37129

SHIP TO : Resolute FP US Inc.
Catawba Main Storeroom Receiving
5300 Cureton Ferry Road
P.O. Box 7
CATAWBA, SC 29704

SUPPLIER CODE: 18056
FAX: 877-545-3360

INVOICE: Resolute FP US Inc
Catawba Accounts Payable
PO Box 7
CATAWBA, SC 29704

Contact: DAVID OWEN
Phone: 877-545-3360
Fax: 877-545-3360

BUYER: Joseph Hammond
Phone: (803) 981-8183
Fax: (803) 981-8260
Email: Joseph.Hammond@ResoluteFP.com

PLEASE FURNISH MATERIAL OR SERVICE BELOW SUBJECT TO TERMS AND CONDITIONS OF THIS ORDER. NO SUBSTITUTIONS TO THE DESCRIPTION OR CHANGES TO THE PRICE ARE ALLOWED, UNLESS APPROVED BY THE BUYER PRIOR TO SHIPMENT.

DELIVER BEFORE 02/27/2015 **PAYMENT TERMS** NET 60 **SHIP VIA** :
FREIGHT TERMS: ORIGIN PPD & INVOICED

ITEM	QUANTITY	UOM	DESCRIPTION OF ITEM	UNIT PRICE
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1	15,000.00	\$	Customer Catalog #: SL456085 Provide training and support to our COM/CEM's maintenance program	1.00000
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Tax: South Carolina Exempt

TAG EACH PART WITH OUR CATALOG NUMBER

Total:	USD \$	15,000.00
--------	--------	-----------

IMPORTANT INSTRUCTIONS

- > Please acknowledge receipt and obtain approval from the buyer for price changes prior to shipping, also specify shipping date by fax or email.
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- > All other correspondence is to be sent to Purchasing Department.
- > Cash discount period will date from receipt of correctly executed invoice (EXCEPT for Pay on Receipt PO).
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1 From Please print and press hard.
Date **4/15** Sender's FedEx Account Number **4705-2758-7**

Sender's Name **DALE HERENDEEN** Phone (**803**) **817-4717**

Company **ABTIDIBOWATER RESOLUTE**

Address **5300 CURETON FERRY RD**

City **CATAWBA** State **SC** ZIP **29704-7700**

2 Your Internal Billing Reference
First 24 characters will appear on invoice. OPTIONAL

3 To Recipient's Name **Lauren Greene** Phone (**803**) **898 3432**

Company **SCDHEC - BAQ**

Address We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address **2600 Bull Street**

City **Columbia** State **SC** ZIP **29201**

0118254333

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Next Business Day
☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☒ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
☐ FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit \$500.
☒ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options
SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
☐ No Signature Required
Package may be left without obtaining a signature for delivery.
☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
One box must be checked.
☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required.
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.
☐ Dry Ice Dry Ice, 9, UN 1845 x kg ☐ Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check
FedEx Acct. No. Credit Card No. Exp. Date

Total Packages Total Weight Total Declared Value¹
lbs. \$.00

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

Rev. Date 2/12 • Part #163134 • ©1994-2012 FedEx • PRINTED IN U.S.A. SRM

611



Ship it. Track it. Pay for it. All online.
Go to fedex.com.



FedEx Tracking Number 8071 4221 5769

JR 1

Form ID No. 0215

Sender's Copy

1 From Please print and press hard.

Date 4/14/15 Sender's FedEx Account Number 4705-2758-7 NYL

Sender's Name DALE HERENDEEN Phone (803) 817-4711 981 8009

Company ABTIBIDOWATER RESOLUTE

Address 5300 CURETON FERRY RD Dept/Floor/Suite/Room

City CATAWBA State SC ZIP 29704-7700

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

OPTIONAL

3 To Recipient's Name RAINY STEWART Phone (803) 898 8009

Company SLDHEC - BAQ

Address We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

Address 2600 BULL ST Use this line for the HOLD location address or for continuation of your shipping address.

City COLUMBIA State SC ZIP 29201

0118254333

Learn to pack like a pro.
Go to fedex.com/packaging.

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new
FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.☒ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.*
Saturday Delivery NOT available.☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

☒ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.☐ No Signature Required
Package may be left without obtaining a signature for delivery.☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes ☐ As per attached Shipper's Declaration. ☐ Shipper's Declaration not required. ☐ Dry Ice ☐ Dry Ice, 9, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment Bill to:

☒ Sender ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/CheckFedEx Acct. No.
Credit Card No.Exp.
Date

Total Packages Total Weight Total Declared Value†

lbs. \$.00

†Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

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April 6, 2015

Mr. Heinz Kaiser
Manager, Air Toxics Section
Bureau of Air Quality Control
SC DHEC
2600 Bull Street
Columbia, SC 29201

Re: Extension Request - Boiler MACT as referenced by 40 CFR 63 Subparts A and DDDDD
Resolute FP US Inc. – Catawba Mill
Title V Permit No. TV-2440-0005

Dear Mr. Kaiser:

The purpose of this letter is to request a 1 year extension from 40 CFR Subpart DDDDD (Boiler MACT) as provided by 40 CFR 63.6(i). Under 63.6(i)(4)(i)(A):

“The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls..”

Table 10 to Subpart DDDDD of Part 63 notes that “facilities may also request extensions of compliance for the installation of combined heat and power, waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this subpart.”

As noted at 63.6(i)(4)(i)(B), the request must be made in writing at least 120 days prior to the compliance date. The request for the extension must include all the information required at 63.6(i)(6)(i).

EPA Region 4 has delegated the authority to implement and enforce Subpart DDDDD to the South Carolina Department of Health and Environmental Control (DHEC) as of March 21, 2011. Therefore, we request DHEC provide a one-year compliance extension to the Catawba Mill for Subpart DDDDD affected sources.

Rule Background and Need for Extension

The No. 1 and No.2 combination boilers are classified as existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid. Resolute initiated a multi-phase project to upgrade the combination boilers for compliance with Boiler MACT requirements in December 2013. In April 2014, Resolute submitted a construction permit application for Phase 1 to upgrade the over fire air (OFA) system and the multi-clone dust collector (MDC) for each boiler. In May 2014, this application was modified to a permit exemption request with the concurrence of the Department (exemption 2440-0005-05x). During Phase 1, Resolute invested approximately \$3,700,000 to upgrade the No. 1 combination boiler and approximately \$2,800,000 to upgrade the No. 2 combination boiler. As a result of Phase 1, both combination boilers are expected to meet the applicable Boiler MACT emission limits in Table 2.

In spite of the capital spent during Phase 1, the continuous opacity monitoring system (COMS) data continues to show the daily average opacity will exceed the operational limit of 10% opacity for dry ESP's from Table 4. As a result of the higher than anticipated opacity, it will be necessary to continue with Phase 2 of the project and upgrade the ESP serving each combination boiler. Upgrading the ESP's is one option to meet the opacity operational limit requires additional engineering, permitting, procurement, installation, operational testing and compliance testing prior to the compliance date.

Affected Units

This extension request applies to the following affected units:

Source	Control Device	Title V ID	Fuel(s)	Purpose	Relevant Standard/ Sub-category
No. 1 Combination Boiler 405 MMBTU/hr	Multi-clone and ESP	2605	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*
No. 2 Combination Boiler 720 MMBTU/hr	Multi-clone and ESP	3705	Biomass Natural Gas Residual Oil Tire-Derived Fuel Specification Used Oil Wastepaper Paper Cores	Process Steam	Existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid*

*October 10, 2013 applicability determination.

This extension request applies to all emission limits, work practice standards, initial performance testing, site-specific monitoring plans, recordkeeping and reporting and all other requirements specified by 40 CFR 63, Subpart DDDDD.

Description of Process Change and Control Equipment Upgrades §63.6(i)(6)(i)(A)

The current compliance strategy for the No.1 and No. 2 combination boilers involves upgrading the ESP's to meet the 10% opacity operating limit in Table 4. The applicable emission limits from Table 2 are expected to be achieved by the 2014 upgrades to the overfire air system and multiclone dust collector serving each combination boiler.

Equipment suppliers have indicated there is insufficient time to engineer the upgrades, perform the fabrication, install the upgraded components, complete troubleshooting, acceptance testing, operator training, and perform the compliance test before the January 31, 2016 Boiler MACT compliance deadline.

The requested 1 year extension for boiler MACT is necessary to complete the following tasks:

- Issue RFP for Scope of Work
- Meet with suppliers and receive technical proposals
- Complete engineering study and cost estimate
- Prepare construction permit application(s) and/or exemption request(s)
- Request capital funds
- Purchase, fabricate, and deliver equipment and materials
- Complete upgrades and operator training
- Performance testing

Compliance Schedule §63.6(i)(6)(i)(B)

The following is a summary of the proposed compliance schedule for the project based on the mill receiving the 1 year extension.

Project Milestone	Target Date
Complete Biennial Combination Boiler PM Compliance Testing	April 2015
AirTek to conduct an initial review of test data, equipment and operation/controls	April 2015 – June 2015
Review Combination Boiler PM and Opacity Testing Results	May – June 2015
Issue RFP's and SOW's	July 2015
Submit Construction Permit Application/Exemption Request	July 2015
Interview Suppliers and Receive Technical Proposals	August 2015
Receive Permit Exemption (if qualified)	August 2015
Prepare FEL1 Estimate for Capital Fund Request	September 2015
Submit Request for Capital Funds	September 2015
Receive Construction Permit (if required)	October 2015
Approval of Capital and Supplier Selections/Notifications	November 2015
Purchase, Fabricate, and Deliver Equipment and Materials	December 2015 – August 2016
Installation during Scheduled Boiler Outages	September – October 2016
Troubleshooting and Acceptance Testing	October 2016 – November 2016
Compliance Testing	December 2016 – January 2017
The date by which final compliance is to be achieved	January 31, 2017

Summary

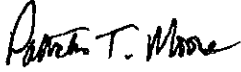
The Catawba Mill has recently spent \$6,500,000 in capital preparing to comply with the Industrial Boiler MACT requirements of 40 CFR Part 63, Subpart DDDDD. Following the results of Phase 1 of our Boiler

Mr. Heinz Kaiser
March 26, 2015
Page 4

MACT compliance activities, additional capital will be required for a second phase. The engineering and fabrication time required to implement Phase 2 necessitates this compliance extension request. In addition, other options are being evaluated with the assistance of AirTek and AECOM.

Should you have any questions or comments regarding this request, please do not hesitate to contact Mr. Dale Herendeen of my staff at 803-981-8009. We appreciate your timely response to this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick T. Moore". The signature is written in a cursive, flowing style.

Patrick Moore
General Manager
Resolute FP US Inc. – Catawba Mill

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Resolute Forest Products – Catawba Mill
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Catawba, SC 29704-0007

FED EX NO. 807142215817

March 25, 2015

Ms. Lauren Greene
Division of Compliance Management – Enforcement Section
SCDHEC – Bureau of Air Quality
2600 Bull Street
Columbia, SC 29201-1708

Re: Revision to 2014 Fourth Quarter CEM Report Summaries
Air Permit Number TV-2440-0005

Dear Ms. Greene:

Resolute Forest Products – Catawba Mill has revised the entry for Condition 07.12(B) in the previously submitted referenced report.

The initial report indicated that the 10-day average of nitrogen oxides (NO_x) emissions had exceeded the limit of 78 ppm. The log referenced by the condition began December by indicating two short-term NO_x monitor malfunctions. We have since learned that the extent of the monitor malfunction was broader than initially believed.

High oxygen-corrected NO_x readings were first observed on December 8th for operating days December 6th and 7th. Between December 8th and 10th, operators and electrical / instrumentation (E/I) technicians made operational and monitor adjustments, but high readings persisted. Because the furnace was combusting mostly oil and/or natural gas during this time (due to an outage of the kraft fiberline), it was our belief that the fuel change had probably caused higher NO_x levels. We now understand that burning oil or natural gas should have actually reduced NO_x emissions, as demonstrated by emission estimates submitted for our Title V operating permit renewal application.

At our request of December 11th, Environmental 360 sent a technician to the Catawba Mill on December 12th to service the monitor. According to the technician's report, "the NO_x analyzer had low flow and pressure was out of limits. The unit's orifices and reaction cells were contaminated and needed to be cleaned and rebuilt. The perm dryer was very dirty and needed to be replaced. The output voltages were not correct."

The technician did not approve of the condition of the spare monitor located on-site, so an acceptable spare monitor was obtained and installed on December 13th. The original monitor was sent to Thermo Environmental Instruments, Inc. (Thermo) for repair. The February 2015 report from Thermo listed the monitor's condition upon arrival as "heavily contaminated, cooler

alarm, dirty permeation dryer, dark screen, bad output signals from I/O pcb, vacuum pump failure, un-shielded pmt data cable.”

Unfortunately, the mill’s Environmental Department did not have access to the Environmental 360 technician’s report or the Thermo technician’s report until the Fourth Quarter report was submitted. We now believe, based on both technicians’ reports, that data from the NO_x monitor had probably not been reliable for several days prior to its eventual replacement. Therefore, no periods of excess emissions occurred. The revised page 11 of the CEM report and referenced log are attached.

To prevent recurrence, mill personnel have added more detailed maintenance of the NO_x monitor and its components to the regular maintenance schedule.

Based on information and belief formed after reasonable inquiry, I certify to the best of my knowledge, that the statements and information in this submission are true, accurate, and complete.

If there are any questions, please feel free to contact Dale Herendeen at (803) 981-8009.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick T. Moore". The signature is fluid and cursive, with the first name "Patrick" and last name "Moore" clearly distinguishable.

Patrick Moore
General Manager

PM/dlh
File 208.16

Enclosures



Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

FED EX NO. 807142215839

March 25, 2015

Technical Management Section
South Carolina Department of Health and Environmental Control
Bureau of Air Quality
2600 Bull Street
Columbia, SC 29201-1708

Re: 2014 Fourth Quarter CEM Report Summaries – Revised Page 11
Air Permit Number TV-2440-0005

Dear Sir or Madam:

Enclosed is the referenced revised page of 2014 Fourth Quarter Continuous Emission Monitor (CEM) Report Summaries and Title V monitoring report for Resolute Forest Products – Catawba Mill, Air Permit Number TV-2440-0005. The page has been revised to reflect new information related to nitrogen oxides (NO_x) emissions from No. 3 Recovery Furnace. Information received after the original report submittal revealed that the NO_x CEM malfunctioned much earlier than previously reported.

Based on information and belief formed after reasonable inquiry, I certify to the best of my knowledge, that the statements and information in this submission are true, accurate, and complete.

If there are any questions, please feel free to contact Dale Herendeen at (803) 981-8009.

Sincerely,

A handwritten signature in black ink that reads 'Patrick T. Moore'. The signature is written in a cursive, flowing style.

Patrick Moore
General Manager

PM/dlh
File 208.16

Enclosures

cc: Steve Moseley, Region 3 Lancaster EQC Office

2014 Fourth Quarter CEM Report Summaries

During the reporting period, there were two instances of hourly average wash water flow below the minimum allowable, occurring in September and December. There were no other instances of deviation from the scrubber monitoring ranges. See the enclosed log for details.

Condition 07.3

Equip ID 5105

Reporting Frequency: Semi-Annually

For the purposes of using this report as a cross reference when completing DHEC annual reporting Form 3650, the following information is being included with this report pursuant to DHEC Form 3650:

- The specific permit condition for which exceptions are being noted is 5.C.07.3.
- Exceptions descriptions are detailed on the enclosed logs along with dates and times.
- The basis for compliance determinations is operation and recording of continuous opacity data and monitor downtime.
- Cause and corrective actions are detailed on the enclosed logs.

There were no three-hour opacity episodes during the semi-annual reporting period.

A summary is listed below for the continuous opacity monitoring downtime and excess emissions for the reporting period.

Continuous Opacity Monitoring – No. 3 Recovery Furnace

	3rd Quarter	4th Quarter	Semi-Annual Period
Monitor Downtime	0.23 %	0.07 %	0.15 %
Excess Emission	0.11 %	0.02 %	0.07 %
Overall Compliance	99.65 %	99.91 %	99.78 %

Condition 07.9(C)

Control Device IDs 2724C, 2725C, & 2726C

Reporting Frequency: Semi-Annually

For the Slaker Scrubber (ID 2725C), there were no variations of a surrogate monitoring parameters during the semi-annual period.

No abnormal dust emissions were noted on the daily logs for the lime silos baghouses (IDs 2724C and 2726C) during the semi-annual reporting period.

Condition 07.12(B)

Equip IDs 2723 & 5105

Reporting Frequency: Semi-Annually

The lime kiln modifications authorized by Construction Permit 2440-0005-DA have not occurred; therefore the requirements of this condition applicable to the No. 2 Lime Kiln (ID 2723) are not yet applicable.

The required data is recorded for the No. 3 Recovery Furnace (ID 5105). The nitrogen oxides (NOx) continuous emissions monitor (CEM) malfunctioned on December 7. Repairs were attempted until the malfunctioning NOx CEM was replaced on December 13. See the enclosed log for details.



Resolute Forest Products – Catawba Mill
5300 Cureton Ferry Road
Post Office Box 7
Catawba, SC 29704-0007

ID 5105

NSPS

CONTINUOUS EMISSION MONITOR SEMI-ANNUAL REPORT LOG

Recovery Boiler No. 3

Report Period 7/1/14 to 12/31/14

Permit Condition 5.C.07.12(B)

This report is for indicated excessive NOx (reported in ppm), monitor downtime or repair (including O2 monitor), or permit condition exceptions.

Incident No.	Date	Start Time (am or pm)	% Opacity or ppm	Monitor (Check One)				Nature and Cause of Incident	Corrective Action
				OPA	TRS	O2	Duration (Minutes)		
1	7/10/14	8:00 AM	-		x		105	TRS and NOx cal gas bottles low	Replaced gas bottles, ran cal
There were no excursion events or downtime during the month of August 2014.									
1	9/10/14	12:30 PM	-		x		165	quarterly audit	completed
2	9/23/14	10:00 AM	-		x		40	NOx bottle low	replaced bottle, ran init cal
There were no excursion events or downtime during the month of October 2014.									
1	11/6/14	2:20 PM	-		x		350	NOx failed mrng cal, comm error	cleaned cooler filter, replaced flash lamp, ran norm & init cal, problem persisted
1	12/7/14	12:00 AM	-		x		10080	raw NOx monitor malfunction	adjusted monitor and operating parameters, problems continued, unit completely failed on 12/12, technician replaced with spare on 12/13 (late PM)
2	12/22/14	12:30 AM	-		x		60	changed TRS and NOx bottle	ran initial cal
3	12/31/14	9:27 AM	-		x		148	quarterly maintenance	rebuilt transport pump, replaced filters, replaced scrubber beads

Based on data provided, reasonable inquiry, and the best of my abilities, I certify that the information contained in this report is accurate and complete.

Name/Title: Patrick Moore

General Manager

Signature:

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Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging

* Declared value limit \$500.

☒ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 x kg ☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages Total Weight Total Declared Value¹

lbs. \$.00

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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1 From Please print and press hard.

Date 3/25/15 Sender's FedEx Account Number 4705-2758-7
Sender's Name DALE HERENDEEN Phone (803) 817-4711

Company ADITIDOWATER RESOLUTE FP

Address 5300 CURETON FERRY RD

City CATAWBA State SC ZIP 29704-7700

2 Your Internal Billing Reference
First 24 characters will appear on invoice.

3 To Recipient's Name TECHNICAL MGMT Phone (803) 898 4075

Company SLDHEC - BAQ

Address 2600 BULL STREET
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address _____
Use this line for the HOLD location address or for continuation of your shipping address.

City COLUMBIA State SC ZIP 29201-1708

0118254333

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

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If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes ☐ Yes ☐ Yes
As per attached Shipper's Declaration. Shipper's Declaration not required.
Dry Ice, 9, UN 1845 x kg
Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender Acct. No. in Section I will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check
FedEx Acct. No. Credit Card No. Exp. Date

Total Packages 1 Total Weight 1 lbs. \$ 00 Total Declared Value¹

¹Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Go to fedex.com/mobilesolutions.



Re: No. 2 Recovery Boiler TRS Monitor
Shroup, Michael

to:

DALE.HERENDEEN@RESOLUTEFP.COM

03/09/2015 08:01 AM

Hide Details

From: "Shroup, Michael" <shroupmd@dhec.sc.gov>

To: "DALE.HERENDEEN@RESOLUTEFP.COM"

<DALE.HERENDEEN@RESOLUTEFP.COM>,

Thanks for the update...hopefully the monitor woes can be cured during the down time. Let me know if I can be of assistance.

Michael D. Shroup
Program Manager
Source Evaluation Section

DHEC - Bureau of Air Quality
2600 Bull Street
Columbia, SC 29201

shroupmd@dhec.sc.gov

phone (803)-898-4051
fax (803)-898-4281

From: dale.herendeen@resolutefp.com <dale.herendeen@resolutefp.com>

Sent: Friday, March 6, 2015 10:05 AM

To: Shroup, Michael

Subject: Re: No. 2 Recovery Boiler TRS Monitor

Michael,

Good morning. The good news is that RB2 TRS monitor was repaired and is functioning quite well.

Less than good news is No. 3 recovery boiler TRS monitor system crashed during a quarterly audit yesterday. After troubleshooting for hours, we made the decision to bring in the GEL Group to set-up an alternative system to monitor TRS. On Saturday evening/Sunday morning, the No. 3 recovery boiler is scheduled to be shutdown for two weeks for annual repairs. During this period, we will repair the permanent TRS monitoring system.

Have a good weekend (hopefully some warmer weather is headed our way).

Thanks,

Dale Herendeen
Environmental Manager
Resolute Forest Products -- Catawba Operations
Catawba, South Carolina
803.981.8009
dale.herendeen@resolutefp.com

At Resolute Forest Products, safety, sustainability and profitability drive our future.

From: Dale Herendeen/CAT/CSC
To: "Shroup, Michael D." <shroupmd@dhec.sc.gov>,
Date: 02/25/2015 10:54 AM
Subject: No. 2 Recovery Boiler TRS Monitor

Michael,

It was good talking with you today.

We will install the separate TRS monitoring system on No. 2 recovery boiler later today to ensure we are measuring TRS on a continuous basis. GEL Group and AMP/Cherokee will be installing and managing the system.

In addition, our efforts will continue to address the issues with the permanent system.

Thanks,

Dale Herendeen
Environmental Manager
Resolute Forest Products -- Catawba Operations
Catawba, South Carolina
803.981.8009
dale.herendeen@resolutefp.com

At Resolute Forest Products, safety, sustainability and profitability drive our future.



Re: No. 2 Recovery Boiler TRS Monitor 📎

Dale Herendeen to: Shroup, Michael D.

Bcc: bsease, Melanie Gardner

03/06/2015 10:05 AM

Michael.

Good morning. The good news is that RB2 TRS monitor was repaired and is functioning quite well.

Less than good news is No. 3 recovery boiler TRS monitor system crashed during a quarterly audit yesterday. After troubleshooting for hours, we made the decision to bring in the GEL Group to set-up an alternative system to monitor TRS. On Saturday evening/Sunday morning, the No. 3 recovery boiler is scheduled to be shutdown for two weeks for annual repairs. During this period, we will repair the permanent TRS monitoring system.

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Thanks,

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Catawba, South Carolina
803.981.8009
dale.herendeen@resolutefp.com

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Dale Herendeen

Michael, It was good talking with you today.

02/25/2015 10:54:10 AM

From: Dale Herendeen/CAT/CSC
To: "Shroup, Michael D." <shroupmd@dhec.sc.gov>
Date: 02/25/2015 10:54 AM
Subject: No. 2 Recovery Boiler TRS Monitor

Michael,

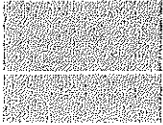
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Dale Herendeen
Environmental Manager
Resolute Forest Products -- Catawba Operations



No. 2 Recovery Boiler TRS Monitor
Dale Herendeen to: Shroup, Michael D.
Bcc: bsease, Melanie Gardner

02/25/2015 10:54 AM

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In addition, our efforts will continue to address the issues with the permanent system.

Thanks,

Dale Herendeen
Environmental Manager
Resolute Forest Products -- Catawba Operations
Catawba, South Carolina
803.981.8009
dale.herendeen@resolutefp.com

At Resolute Forest Products, safety, sustainability and profitability drive our future.

...the issues with

...the issues with

KBZ TRS
ORIGINAL

SERVICE QUOTE

Thermo Environmental Instruments, Inc
27 Forge Parkway
Franklin, MA. 02038
Phone: 866-282-0430
Fax: 508-520-2800

PARTS AND LABOR USED

Product Name	Product Description	Quantity	Unit Price	Total Price
102496-00	ASSEMBLY, LCD	1	USD 336.00	USD 336.00
108002-00	PUMP REBUILD KIT (43I)	1	USD 84.00	USD 84.00
7336	Capillary, 18 MIL L Purp/Blue	1	USD 49.00	USD 49.00
8666	LAMP, UV SOURCE (43/43A)	1	USD 854.00	USD 854.00
LBR-AQ SRC GAS	Labor Hrs - Aq Source Gas	6	USD 170.00	USD 1,020.00
			Grand Total:	USD 2,343.00

SERVICE QUOTE

Thermo Environmental Instruments, Inc
27 Forge Parkway
Franklin, MA. 02038
Phone: 866-282-0430
Fax: 508-520-2800

RA#	ORIGINAL QUOTE DATE
00025697	_____
CUSTOMER	RESPONSE NEEDED BY
Resolute Forest Products	_____
CONTACT	PAYMENT METHOD
Bobby Polk	PO
PRODUCT SERVICED	SERIAL NUMBER
43i	0614616977

SUBMITTED BY

Contact: Erik Hebert

Email: erik.hebert@thermofisher.com

PLEASE CONFIRM YOUR BILLING ADDRESS:

PO Box 7
Catawba
SC
29704
United States

PLEASE CONFIRM YOUR SHIPPING ADDRESS:

5300 Cureton Ferry Rd
Catawba
SC
29704
United States

BILLING INFO:

Payment Method: PO

PO#: _____

Quote Validity Date: _____

SHIPPING INFO:

Carrier: _____

Priority: _____

Method: _____

Account: _____

Shipping Notes: _____

REMITTANCE INFORMATION:

Thermo Environmental Instruments, Inc. PO Box 712099 Cincinnati, OH 45271-2099 (Acct # 359681124228)

APPROVAL SIGNATURE:

Approved By: _____ Date: _____

DESCRIPTION OF SERVICE: Repair & Calibration

QUOTE NOTE: Replaced lamp, LCD screen, and capillary. Rebuilt pump and cleaned instrument. Tested and calibrated to 5 ppm range. All tests passed and specs were met.

NOTE: PARTS AND LABOR DETAIL ON PAGE 2

GA COMPLETED REPAIR CHECKLIST

RA No.: 25697
Model: 43
Serial No.: 0614616977

- Review case description and comments
- Serial Number/Voltage/CE Labels intact and readable
- Instrument clean
- Plumbing – proper layout, clean, correct type
- Foam Inserts for circuit boards
- "C " Series boards seated
- Pump Secured
- No loose debris in instrument
- Hardware Secured
- Fittings Tightened
- Cables Secured and Tie Wrapped
- Accessories Included
- Cap Plugs on Bulkhead Fittings
- No missing case screws
- Cover Secured
- All test/calibration documents included
- Customer Order – Billing Address Correct
- Customer Order – Shipping Address Correct
- Customer Order – P/N, Qty, Price, & Whse Correct

Tech	QC
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
N/A	N/A
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓
✓	✓

Date 1/24/15 Date 1-20-15

Technician: E.H. [Signature]

QC: Sten [Signature]

SO₂ Linearity Test

Set - ϕ ppm
Actual - ϕ ppm

Set - 1.00 ppm
Actual - 1.01 ppm

Set - 2.50 ppm
Actual - 2.52 ppm

Set - 4 ppm
Actual - 4.04 ppm

RA# 25697

Model 43i

SN: 0614616977

ϕ - 5 ppm Range

Avg. Time: 30 sec.

Chart Speed: 2 mm/min.

5 ppm